MV-7101DS

SERVICE MANUAL

US Model

Ver 1.2 2004.04

- MV-7101DS is composed of following models.
  For XVM-R70 (including XA-115), refer to the service manual issued separately.

COMPONENT MODEL NAME

	MODEL NUMBER LABEL	PRINTED MODEL NAME
DVD PLAYER	MV-7101DS	MV-101
OVERHEAD MONITOR	MV-7101DS	XVM-R70
CONNECTION BOX	–	XA-115
CORDLESS STEREO HEADPHONE	MDR-IF0140	MDR-IF0140
CARD REMOTE COMMANDER	–	RM-X135

SPECIFICATIONS

DVD player MV-101

System

Laser	Semiconductor laser
Signal format system	NTSC

Audio characteristics

Frequency response	20 Hz to 20 kHz
Signal to noise ratio	90dB (A)
Hermonic distortion	0.03 %
Dynamic range	90dB
Wow and flutter	below measurable limits (±0.001% W PEAK)

General

Outputs	Audio output Video output Optical output
Inputs	IR input DV 12V input
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 189 × 70 × 243 mm ($7\frac{1}{2} \times 2\frac{7}{8} \times 9\frac{5}{8}$ in) (w/h/d)
Mass	Approx. 2.1 kg (4 lb 11 oz)
Operating temperature	0 °C to 45 °C (32 °F to 113 °F)
Supplied accessories	Parts for installation and connections (1 set) Card remote commander RM-X135 Operating Instructions (1 set)

Overhead Monitor XVM-R70

Monitor

System	Liquid crystal color display
Display	Manual flipdown panel
Drive system	TFT-LCD active matrix system
Picture size	7 inches wide screen (16:9) 154 × 87 mm, 176 mm ($6\frac{1}{8} \times 3\frac{1}{2}$ in, 7 in) (w/h, d)
Picture segment	336,960 (w 1440 × h 234) dots
Power requirements	12 V DC car battery (negative ground)
Current drain	Approx. 800 mA
Dimensions	230 × 57 × 270 mm ($9\frac{1}{8} \times 2\frac{3}{8} \times 10\frac{3}{4}$ in) (w/h/d)
Operating temperature	5 °C to 45 °C (41 °F to 113 °F)
Mass	Approx. 1.5 Kg (3 lb 5 oz)
Supplied accessories	Connection box XA-115 (1) Monitor cable (5 m) (1) Power supply cord (1) DC-DC cord (3 m) (1) Mounting plate (1) Screws (4) Tapping Screws (4)

Connection box XA-115

A/V Output	
Output Impedance:	less than 220 Ω less than 100 pF
Output Level:	0 dBs ±3 dB (0.775 V rms) (Vol Max)
Video:	75 Ω 1Vp-p
A/V Input × 3	
Input Impedance:	more than 10 K Ω less than 1000 pF
Input Level:	±1.3 dBs +0/-0.3 dB (0.775 V rms)
Video:	75 Ω 1 Vp-p
DC output	7.5 V (max 2 A)
Dimensions	150 × 42 × 80 mm ($6 \times \frac{11}{16} \times 3\frac{1}{4}$ in) (w/h/d)
Mass	Approx. 260 g (9 oz)

Cordless Stereo headphone MDR-IF0140

General

Modulation system	Frequency modulation
Carrier frequency	Right 2.8 MHz Left 2.3 MHz
Frequency response	18 - 22,000 Hz
Power source	DC 1.5 V (size AAA) dry battery
Mass	Approx. 125 g (4.41 oz) including battery

Design and specifications are subject to change without notice.

MOBILE VIDEO SYSTEM

9-877-405-03
2004D05-1
© 2004.04
Sony Corporation
e Vehicle Company
Published by Sony Engineering Corporation

SONY®

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

Never look into the laser diode emission from right above when checking it for adjustment. It is feared that you will lose your sight.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 ˚C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 ˚C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

About discs this player can play

This player can play 12 cm (4 7/10 in) disc only.

- DVD
- Video CD
- Audio CD
- CD-R/CD-RW

Disc type	Label on the disc
DVD Videos	DVD VIDEO, DVD VIDEO
Video CDs	COMPACT disc DIGITAL VIDEO, VIDEO CD
Audio CDs	COMPACT disc DIGITAL AUDIO, COMPACT disc DIGITAL AUDIO Recordable, COMPACT disc DIGITAL AUDIO ReWritable
MP3 files	COMPACT disc DIGITAL AUDIO ReWritable, COMPACT disc DIGITAL AUDIO Recordable, COMPACT disc Recordable, COMPACT disc ReWritable

Notes on CD-Rs (recordable CDs)/ CD-RWs (rewritable CDs)

- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/CD-RW that is not finalized*.
- You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.

* *A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player. Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs)*

TABLE OF CONTENTS

1. GENERAL
Location of Controls 4

2. DISASSEMBLY
2-1. Disassembly Flow 11
2-2. Cabinet Front Assy 11
2-3. Cavity (Rear) 12
2-4. Case (Upper) 12
2-5. DVD MD Assy 13
2-6. Chassis (MD) Assy 13
2-7. SERVO Board, Mechanism Deck 14
2-8. TD-S-TOP-COVER 14
2-9. Loading Mechanism Assy 15
2-10. Traverse Mechanism Assy 15

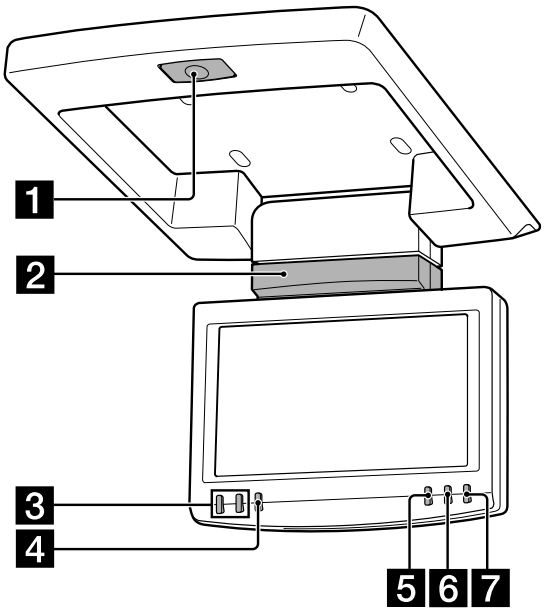
3. DIAGRAMS
3-1. Note for Printed Wiring Boards and Schematic Diagrams 17
3-2. Printed Wiring Boards – KEY Section – 18
3-3. Schematic Diagrams – KEY Section – 19
3-4. Printed Wiring Board – POWER Section – 20
3-5. Schematic Diagram – POWER Section – 21

4. EXPLODED VIEWS
4-1. Overall Section 23
4-2. Cabinet Front Assy Section 24
4-3. Case (Lower) Assy Section 25
4-4. DVD MD Assy Section 26
4-5. Mechanism Deck Section-1 27
4-6. Mechanism Deck Section-2 28
4-7. Mechanism Deck Section-3 29

5. ELECTRICAL PARTS LIST 30

Location of controls

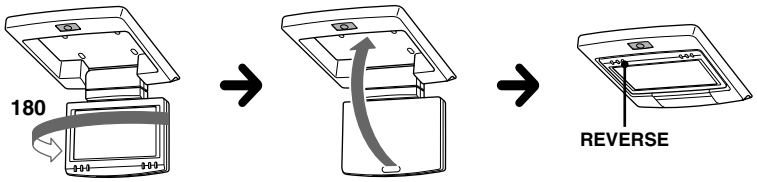
Monitor XVM-R70



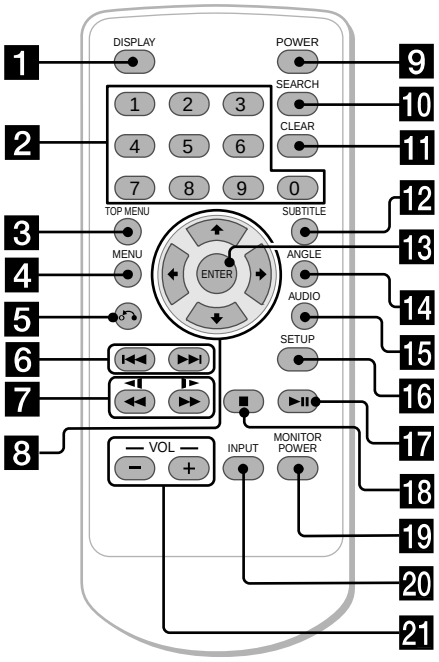
Warning when installing in a car without an ACC (accessory) position on the ignition key switch
To turn off the player and the monitor, after you set the power select switch to ❸ (the setting without ACC position) for your car (for details, refer to the installation/connections manual)
There are 3 ways to turn off the player and the monitor:
— After turning off the ignition, be sure to press (POWER) on the monitor.
— After turning off the ignition, (MONITOR POWER) on the card remote commander.
— After turning off the ignition, just close the display panel until it clicks.
Otherwise, the player and the monitor do not turn off and this causes battery drain.

1 OPEN button
To open the monitor.
2 Receptor for the card remote commander/Transmitter for the cordless headphones
3 UP/DOWN (↑/↓) buttons
To select the desired item.
4 MENU button
To adjust the various display settings.
5 REVERSE button*
To switch images upside down.
6 INPUT button
To select the input source.
7 POWER button
To turn on/off the player and the monitor.

** The reverse position of the display monitor.*
You can close with the LCD surface out after turning around 180 degrees, and images on the screen can be turned upside down by pressing (REVERSE) on the monitor. Before closing the display monitor, make sure that the monitor is turned and facing the enclosure (you will hear a click). Each time you press (REVERSE) on the monitor, the reverse screen mode switches between on and off.



Card remote commander RM-X135



Refer to the pages listed for details.

1 DISPLAY button
To display a running time.

2 Number buttons

3 TOP MENU button
To display the top menu of a recorded DVD or to turn on/off the PBC (Playback control) menu of a Video CD.

4 MENU button
To display the recorded DVD menu.

5 ↶ (return) button

6 I◄◄/►►I (previous/next) buttons

7 ◄I/◄◄ (fast/slow reverse)/ ►►/I► (fast/slow forward) buttons

8 ↑/→/↓/← buttons

9 POWER (on/off) button
To turn on/off the player. For details, refer to the POWER (on/off) button (1) on the player

10 SEARCH button
To specify a desired point on a disc by chapter, title, or track.

11 CLEAR button

12 SUBTITLE button
To change the subtitle language while playing a DVD

The corresponding buttons of the card remote commander control the same functions as those on the player and the monitor.
Instructions in this manual describe how to use the player and the monitor by mainly using the card remote commander.

Tip
Refer to "Replacing the lithium battery of the card remote commander" for details on how to replace the battery.

***Cautions about the POWER (on/off) button* (9)**
The POWER (on/off) button (9) is only for the player. If you want to turn off the player and the monitor completely, press the MONITOR POWER (19).

***Cautions about the MONITOR POWER (on/off) button* (19)**
- *To turn off the player and the monitor, press the MONITOR POWER button (19) or press the POWER button (7) on the monitor or close the display panel of the monitor until it clicks.*
- *To turn on the player and the monitor again, be sure to press the POWER button (7) on the monitor.*

13 ENTER button
To enter a setting.

14 ANGLE button
To select the multiple angles of view while playing or pausing a DVD.

15 AUDIO button
To change the audio output/audio language

16 SETUP buttons
To enter or quit the setup menu.

17 ►II (play/pause) button

18 ■ (stop) button

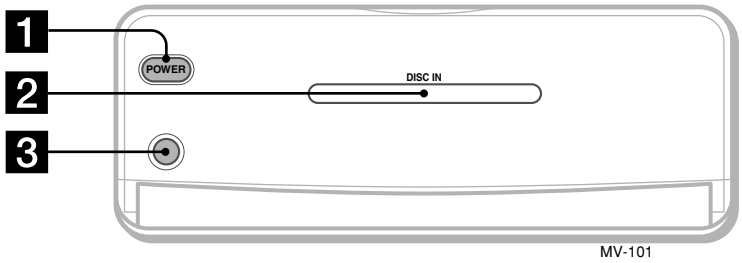
19 MONITOR POWER (on/off) button*
To turn on/off the player and the monitor.

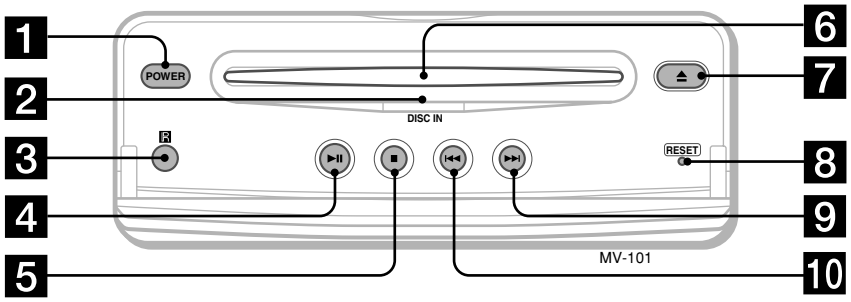
20 INPUT button*
To select the input source.

21 VOL (–/+) buttons*
To turn up or down the volume.

** For the monitor XVM-R70. These buttons also work for optional Sony monitors other than XVM-R75 and XVM-H6.*

DVD player MV-101





Refer to the pages listed for details.

1 POWER (on/off) button

The player doesn't turn on, when the monitor is turned off. Turn on the monitor first.

To turn on/off the player, press and hold the POWER button until the green light of the button is turned on/off.

2 DISC IN light
When a disc is in the player, the DISC IN light glows orange.

3 Receptor for the card remote commander

4 ►II (play/pause) button

5 ■ (stop) button

6 Disc slot

7 ⏏ (eject) button
Available to eject a disc from the player even when the player is turned off.

8 RESET button

9 ►►I (next) button

10 I◄◄ (previous) button

Cautions

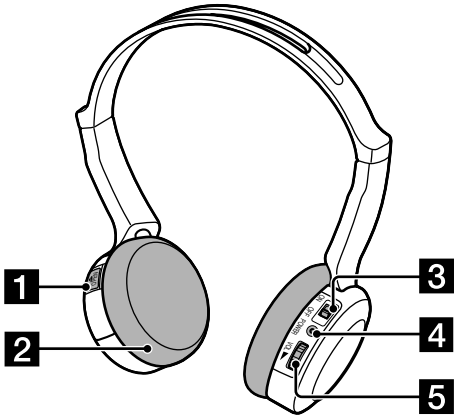
The player doesn't turn on, when the monitor is turned off.

- To turn on the player, press (POWER) on the monitor or (MONITOR POWER) on the card remote commander. The player turns on in conjunction with the monitor.
- If the player does not turn on in conjunction with the monitor, press (POWER) on the remote commander or on the player until the green light of the POWER button (1) on the player lights up.

Note

Even when the player is turned off, you can eject a disc from the player, though you cannot insert a disc.

Cordless Stereo Headphone MDR-IF0140



1 Battery compartment lid
To set a battery, open the lid.

2 Ear pad
The ear pads are replaceable.

3 Power (ON/OFF) switch

4 POWER indicator
When the power switch of the headphones is set to ON, the POWER indicator lights up in red.

5 VOL control dial
To adjust the volume level from 0 to 10.

Battery life

Size AAA dry battery (1) is supplied with the headphone.

Battery	Approx. hours*1
Sony alkaline battery LR03/AM-4 (N)	60 hours*2
Sony manganese battery R03/UM-4 (NU)	28 hours*2

*1 *at 1 kHz, 1 mW+1 mW output*
*2 *Time stated above may vary, depending on the temperature or conditions of use.*

Notes on Battery

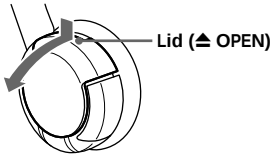
- Do not charge the dry battery.
- Do not carry the dry battery together with coins or other metallic objects. It can generate heat if the positive and negative terminals of the battery are accidentally come into contact with metallic objects.
- When you are not going to use the headphones for a long time, remove the battery to avoid damage from battery leakage or corrosion.

When to replace the battery

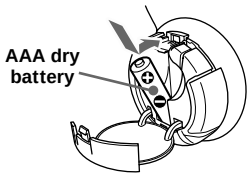
When the battery becomes weak, the power indicator light dims, or sound becomes distorted or noisy. Replace the battery with new one as soon as possible.

Inserting the battery

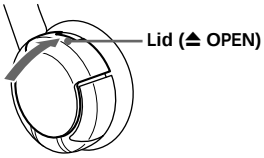
1 Open the lid (⏏ OPEN) of the left housing.



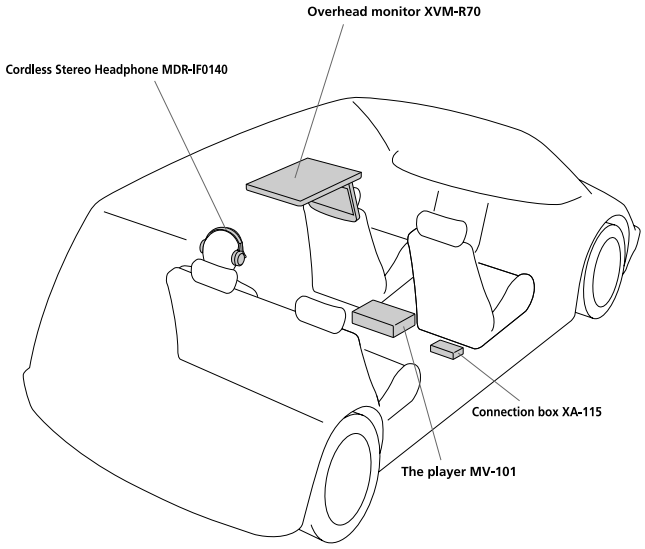
2 Insert the size AAA dry battery into the battery compartment matching ⊕ terminal on the battery to ⊕ on the compartment.



3 Close the lid (⏏ OPEN).



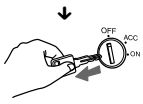
Mounting example

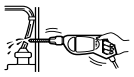


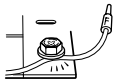
Parts list (1)

The numbers in the list are keyed to those in the instructions.

Cautions on installation of the monitor XVM-R70







- Installing the monitor requires technical expertise.
  The monitor should be installed by a qualified technician or service personnel.
- If you try to install the monitor by yourself, do it properly, referring to the installation and connection diagrams in this installation/connection manual. Improper installation may result in fire or electric shock.
- Before installation, be sure to turn the ignition key switch to the OFF position or take the key out. Installing the monitor with the ignition key switch ON may cause battery drain or a short circuit.
- Do not damage any pipes, tubes, the fuel tank or electric wiring when installing the monitor. This can cause a fire. If you drill a hole in car panels, make sure that any hidden car parts will not be damaged.
- Do not use any nuts or bolts for safety devices such as steering linkage, fuel supply or braking systems. This can cause a fire or an accident.
- Take care to prevent cords and wires from getting tangled or crimped in the moving portion of a seat rail.

How to install the monitor XVM-R70 (2)

Caution
Installing the monitor requires technical expertise. The monitor should be installed by a qualified technician or service personnel.

Where to install

Before installing the monitor, please check your local traffic rules and regulations. Follow the diagram below to install the monitor in a suitable position in your car.

Do not install the monitor where:
— It will obstruct the driver's view when the monitor is in either the open or closed position.
— It will obstruct the operation of the airbag system.
— It will obstruct the operation of the vehicle, especially the steering wheel, shift lever, or brake pedal.
— A driver or passengers may injure themselves when getting into or out of the car.

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

How to set the power select switch on the monitor XVM-R70 (3)

Before installing

Make sure that the POWER SELECT switch is set to the correct position.
Ⓐ*: if your car has ACC (accessory) position on the ignition key switch.
Ⓑ : if your car has no ACC (accessory) position on the ignition key switch.

* Ⓐ *is the factory preset position.*

Warning when installing in a car without ACC (accessory) position on the ignition key switch

To turn on the player and the monitor, after you set the power select switch to Ⓑ (the setting without ACC position) for your car

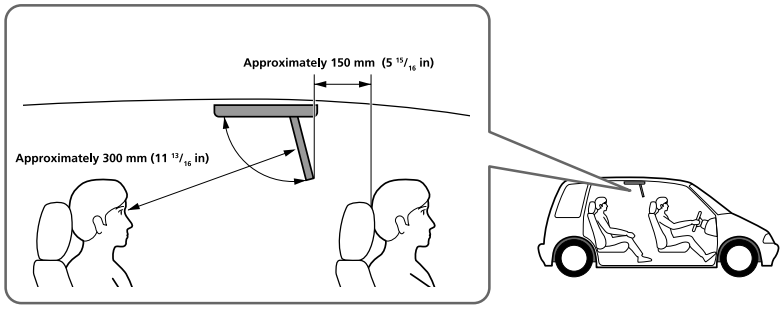
Press POWER on the monitor*.

* *You cannot turn on the player and the monitor by pressing* POWER *or* MONITOR POWER *on the card remote commander.*

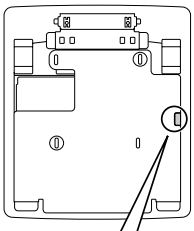
To turn off the player and the monitor, after you set the power select switch to Ⓑ (the setting without ACC position) for your car

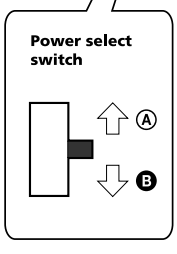
There are 3 ways to turn off the player and the monitor:
— After turning off the ignition, be sure to press POWER on the monitor.
— After turning off the ignition, MONITOR POWER on the card remote commander
— After turning off the ignition, just close the display panel of the monitor until it clicks.

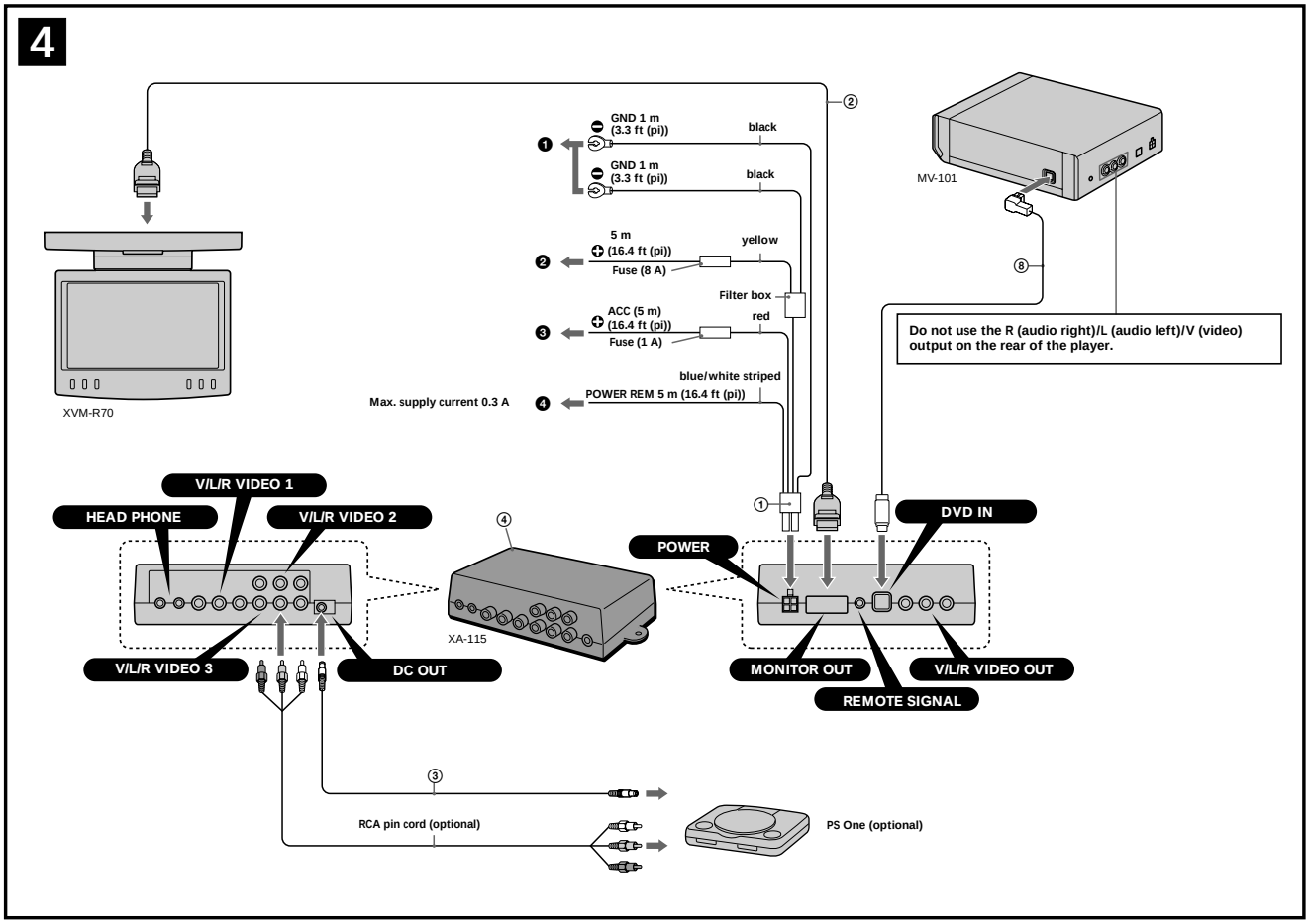
2



3







Cautions before connection

- The products are designed for negative ground 12 V DC operation only.
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Be sure to connect the red power input lead to the positive 12 V power terminal which is powered when the ignition switch is in the accessory position.
- **Run all ground wires to a common ground point.**
- The use of optical instruments with the player will increase eye hazard.
- Use of controls adjustments or performance of procedures of other than those specified herein may result in hazardous radiation exposure.

Notes on the power supply cord (yellow)

- When connecting the player and the monitor in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the products directly to the battery.

Connection diagram (4)

❶ **To a metal surface on the car**
First connect the black ground lead, then connect the yellow and red power input leads.

❷ **To the +12 V power terminal which is powered at all times**
Be sure to connect the black ground lead to a metal surface of the car first.

❸ **To the +12 V power terminal which is powered when the ignition switch is in the accessory position**
Be sure to connect the black ground lead to a metal surface of the car first.
Caution
If your car has no accessory position on the ignition key, be sure to insulate and do not connect the ACC lead (red) to anywhere. If you connect the ACC lead according to the Operating Instructions, it will cause the battery drain.

❹ **To POWER REMOTE IN of an optional power amplifier**
This connection is for amplifiers.

Notes

- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times. Be sure to connect the black ground lead to a metal surface of the car first.*
- *If you use the R (audio right)/L (audio left)/V (video) output on the rear of the player, the output level of video will be halved.*

Cautions on installation of the player MV-101

- Choose the mounting location carefully.
- Avoid installing the player in places:
  - — subject to temperatures below – 30 °C (– 22 °F) or above 45 °C (113 °F)
  - — subject to direct sunlight.
  - — subject to heat;
    Keep all products away from nearby hot vehicle components that heat up over time such as hoses, high current wires, and braking system components. Make sure to leave enough room for ventilation of openings and slots to protect from over heating.
  - — near heat sources such as heaters.
  - — exposed to rain or moisture.
  - — exposed to excessive dust or dirt.
  - — subject to excessive vibration.
  - — where the fuel tank might be damaged by the tapping screws.
  - — where wire harnesses or pipes might be under the place.
  - — where the screws or the player itself might damage the spare tire, tools, or other equipment in or under the trunk.
  - — where the player might interfere with with the normal movements of the driver.
  - — under the floor carpet, as the heat dissipation from the player might damage the carpet.
- Be sure to use only the supplied mounting hardware for a safe and secure installation.
- Use only the supplied screws.
- Make holes of ø 3 mm ($^1/_8$ in) only after making sure there is nothing on the other side of the mounting surface.
- Do not install the player on inclined places. Install the player on a level surface.
- Install the player just horizontally or vertically.

How to install the player MV-101 (5)

When installing the player, choose the mounting location carefully.

1 Place the player where you plan to install it.

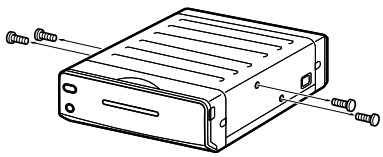
2 Mark the 4 positions for the holes of the screws ⑦ on the surface of the mounting board (not supplied).
The supplied mounting screws ⑦ are 15 mm ($^{19}/_{32}$ in) long, so make sure that the mounting board is thicker than 15 mm ($^{19}/_{32}$ in).

3 Drill the 4 positions to make the holes of ø 3 mm ($^1/_{32}$ in) in diameter.

4 Mount the player on the board (not supplied) with the parts ⑤ and mounting screws of ⑥ and ⑦.

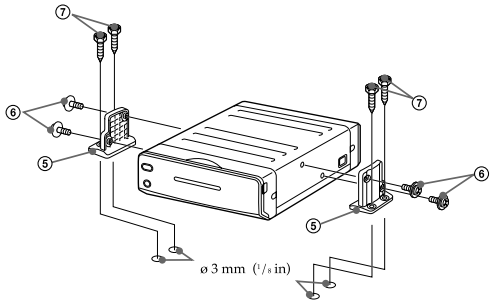
Cautions

- The screws attached to both sides of the player are necessary only when transporting the player. Before installing the player, be sure to take out all of the screws (left side: 2 and right side: 2, so total 4 screws).
- The 4 screws work to mechanically support the player during transportation, so keep the screws for future transportation, such as relocation, etc.

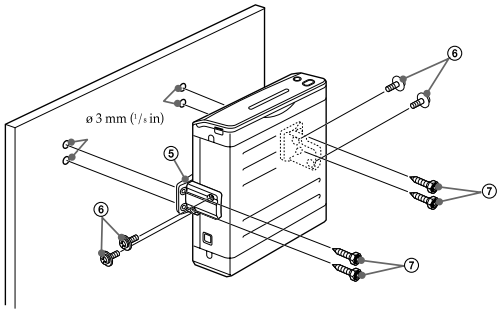


5

A **Horizontal installation**



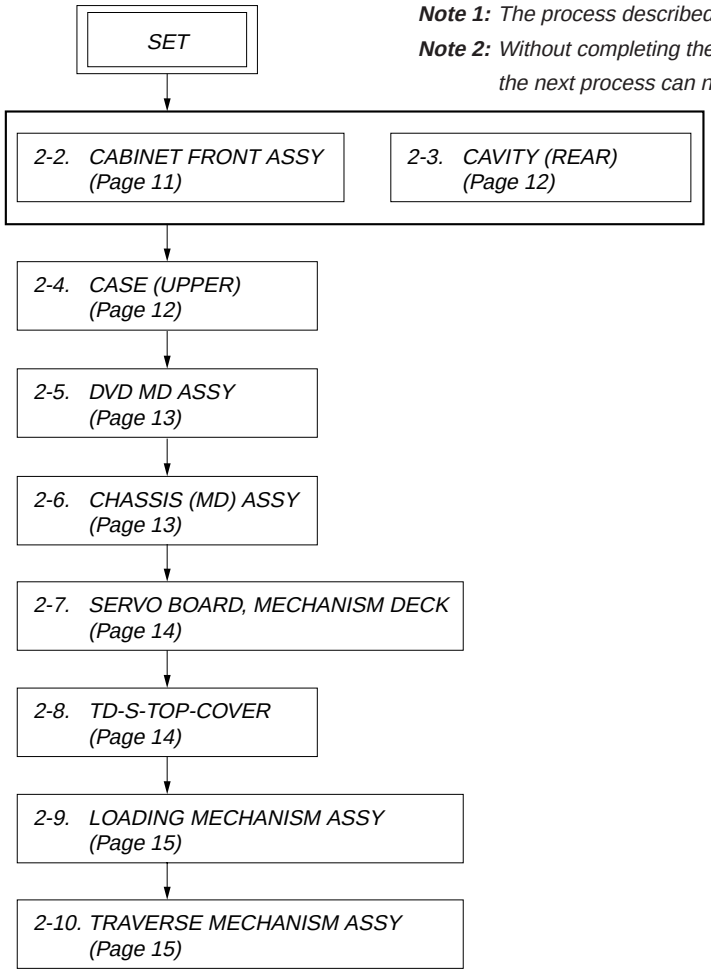
B **Vertical installation**



SECTION 2
DISASSEMBLY

• This set can be disassembled in the order shown below.

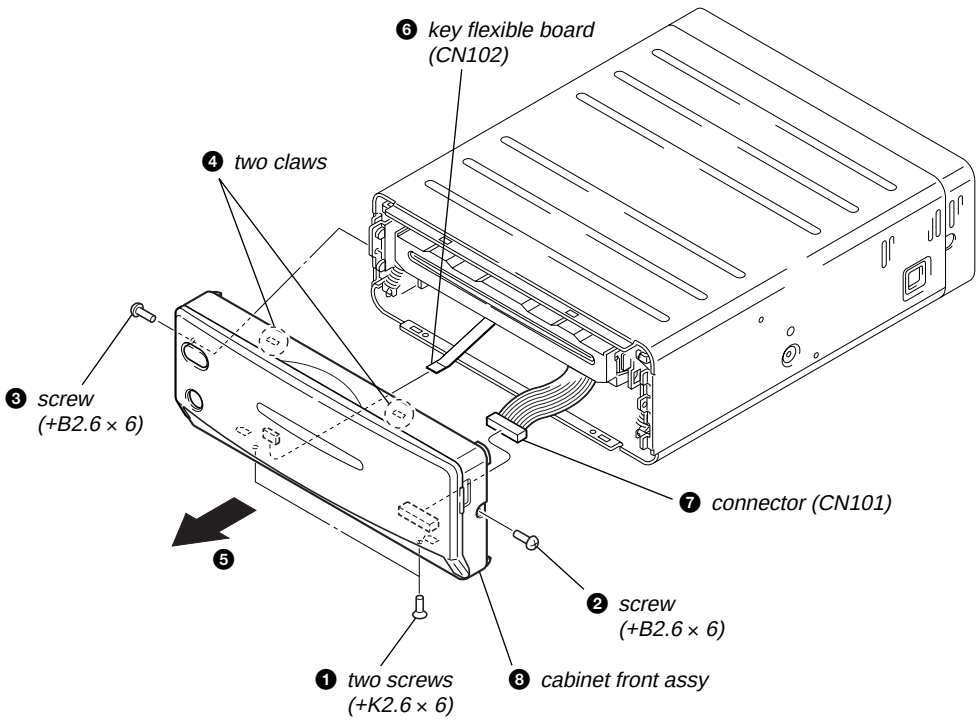
2-1. DISASSEMBLY FLOW


SET
2-2. CABINET FRONT ASSY (Page 11)
2-3. CAVITY (REAR) (Page 12)
2-4. CASE (UPPER) (Page 12)
2-5. DVD MD ASSY (Page 13)
2-6. CHASSIS (MD) ASSY (Page 13)
2-7. SERVO BOARD, MECHANISM DECK (Page 14)
2-8. TD-S-TOP-COVER (Page 14)
2-9. LOADING MECHANISM ASSY (Page 15)
2-10. TRAVERSE MECHANISM ASSY (Page 15)

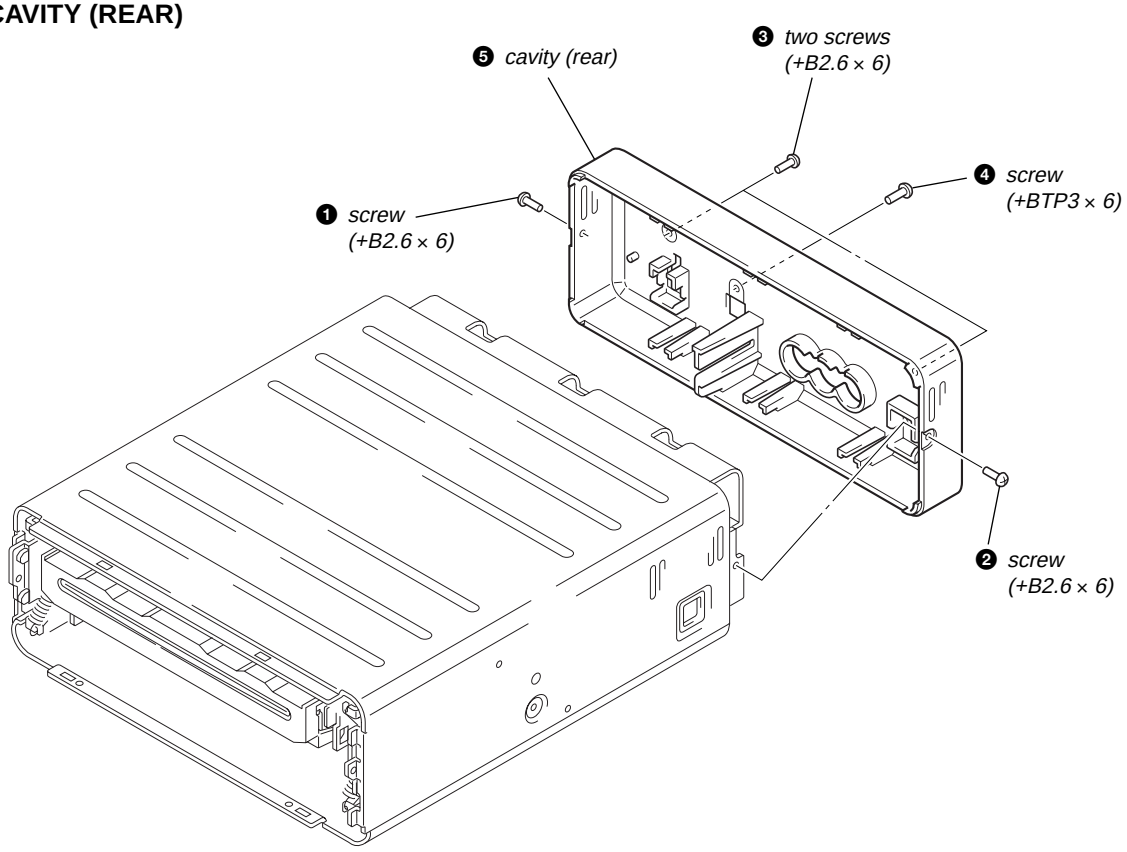
Note 1: *The process described in* ⊟ *can be performed in any order.*
Note 2: *Without completing the process described in* ⊟ *, the next process can not be performed.*

Note: Follow the disassembly procedure in the numerical order given.

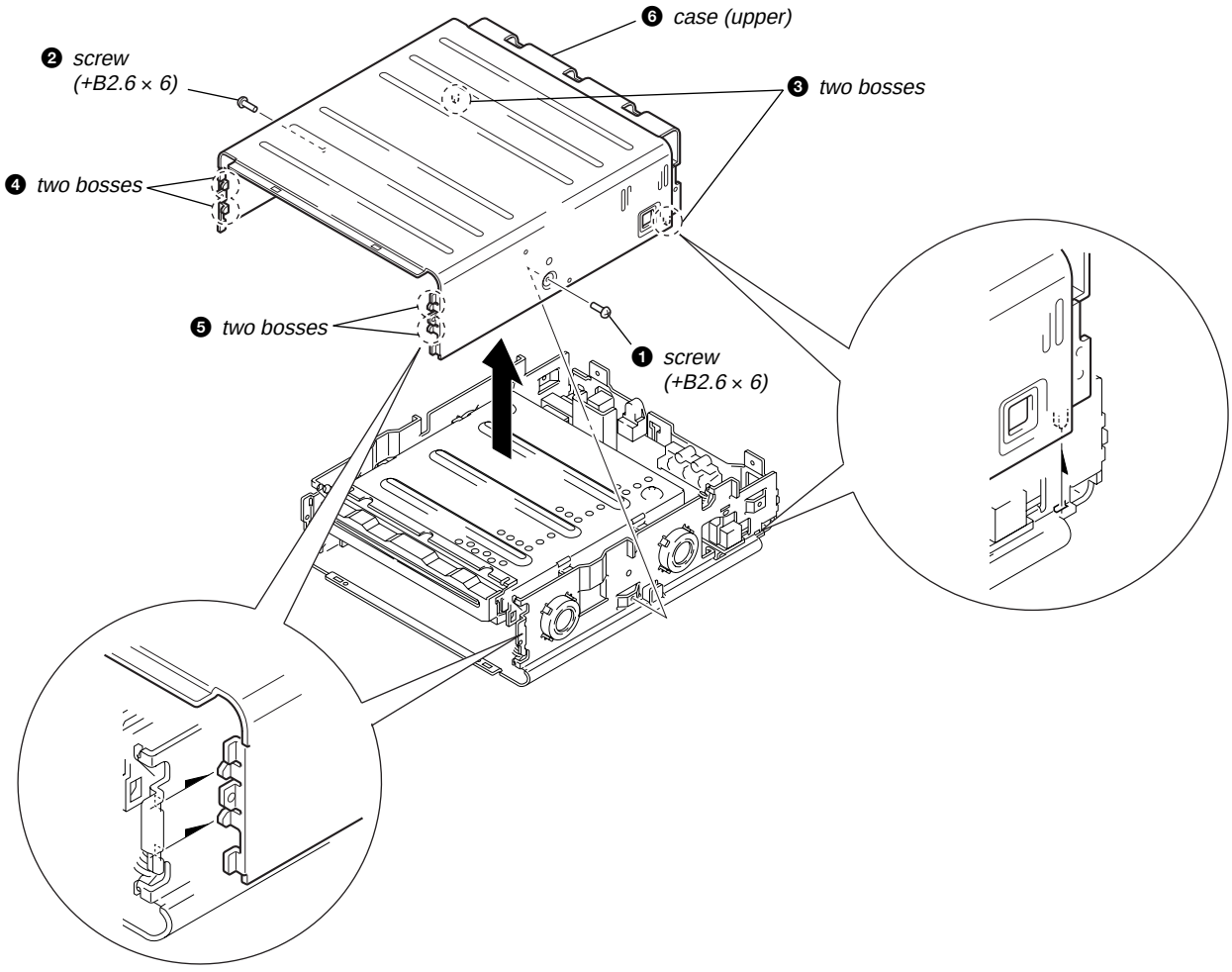
2-2. CABINET FRONT ASSY



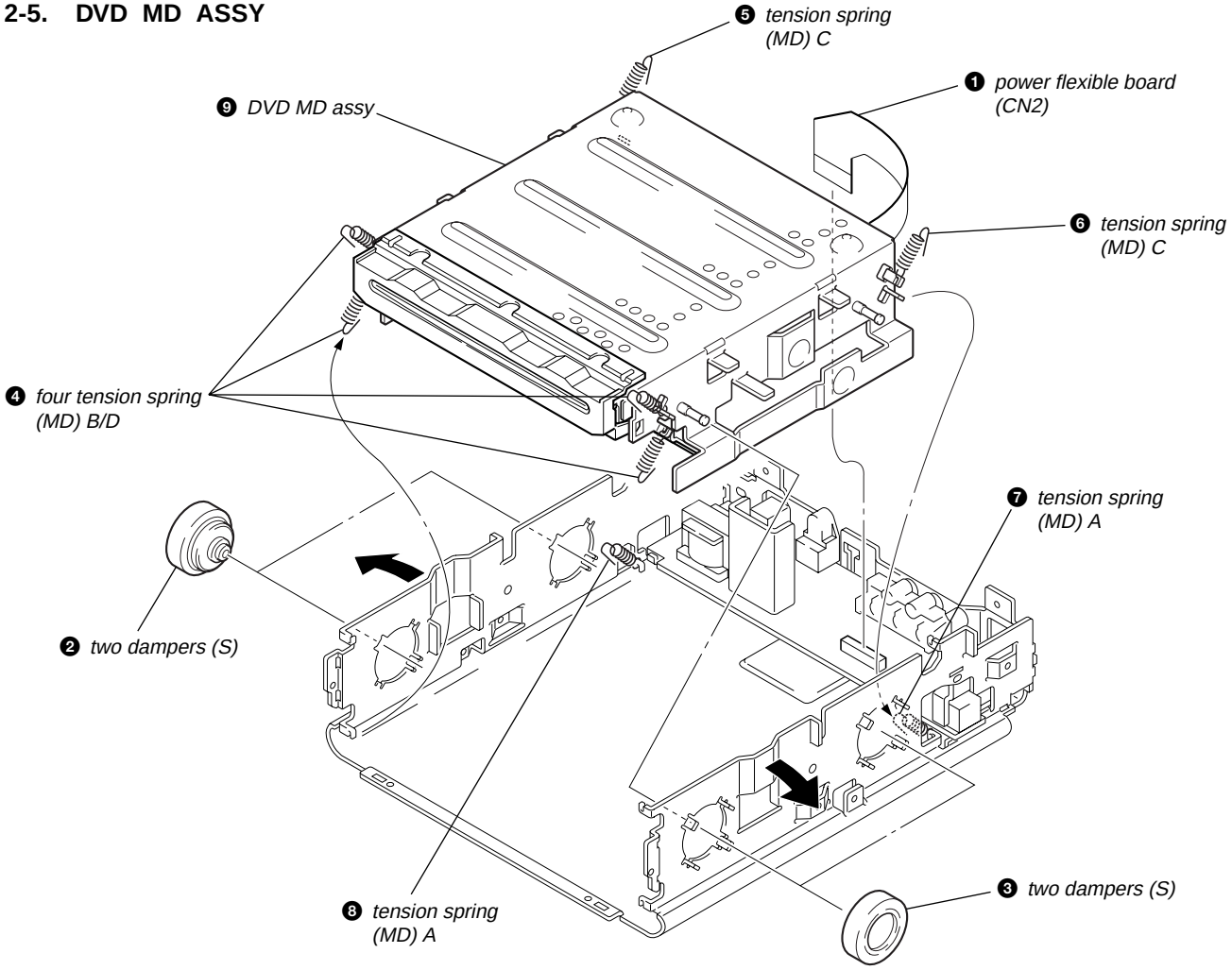
2-3. CAVITY (REAR)



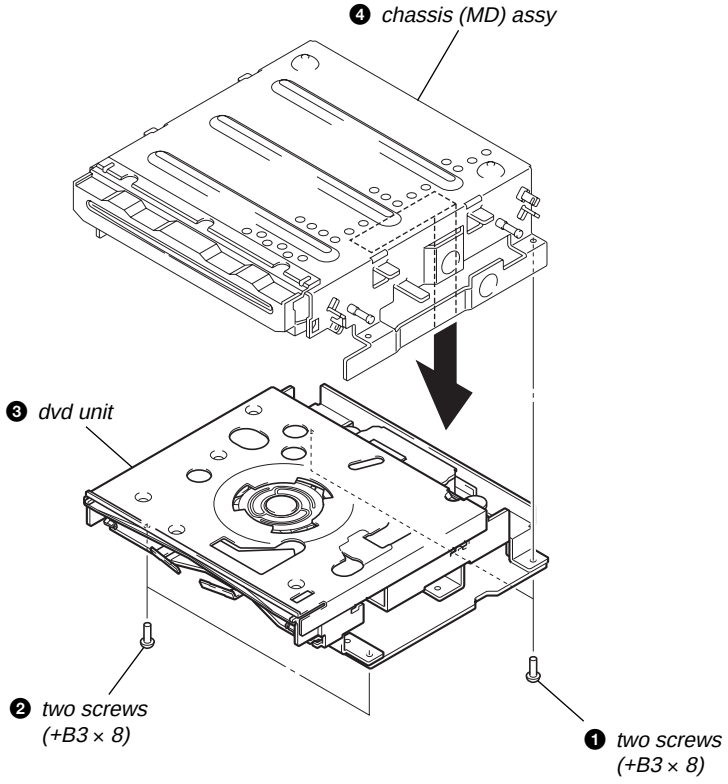
2-4. CASE (UPPER)



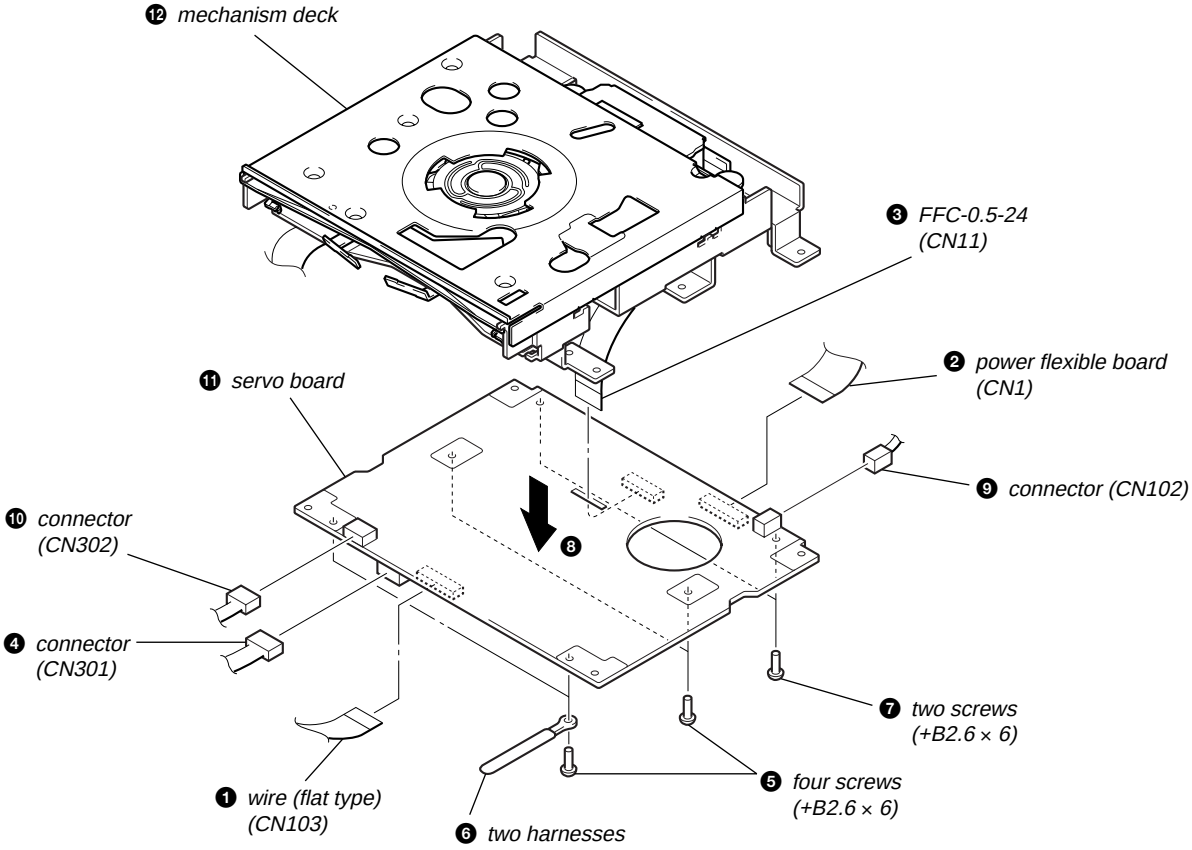
2-5. DVD MD ASSY


❺ tension spring (MD) C
❶ power flexible board (CN2)
❾ DVD MD assy
❻ tension spring (MD) C
❹ four tension spring (MD) B/D
❼ tension spring (MD) A
❷ two dampers (S)
❸ two dampers (S)
❽ tension spring (MD) A

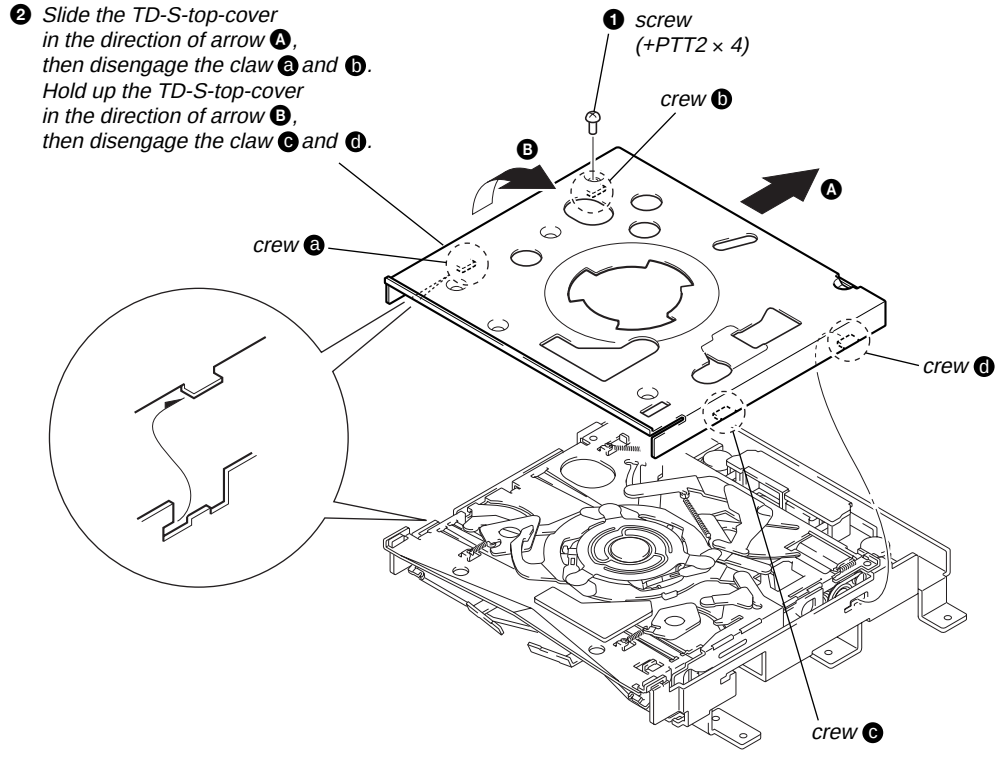
2-6. CHASSIS (MD) ASSY



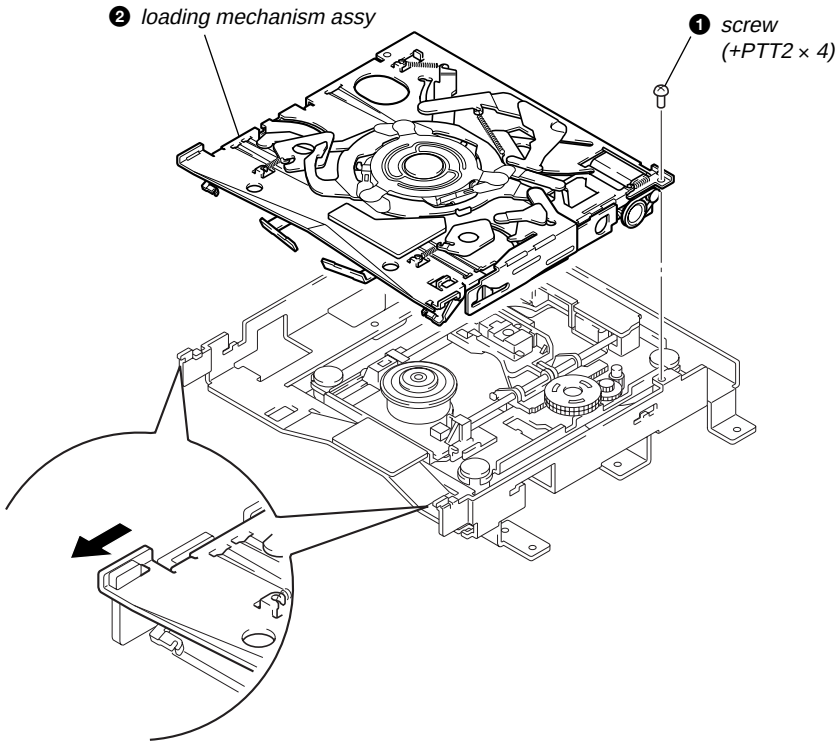
2-7. SERVO BOARD, MECHANISM DECK



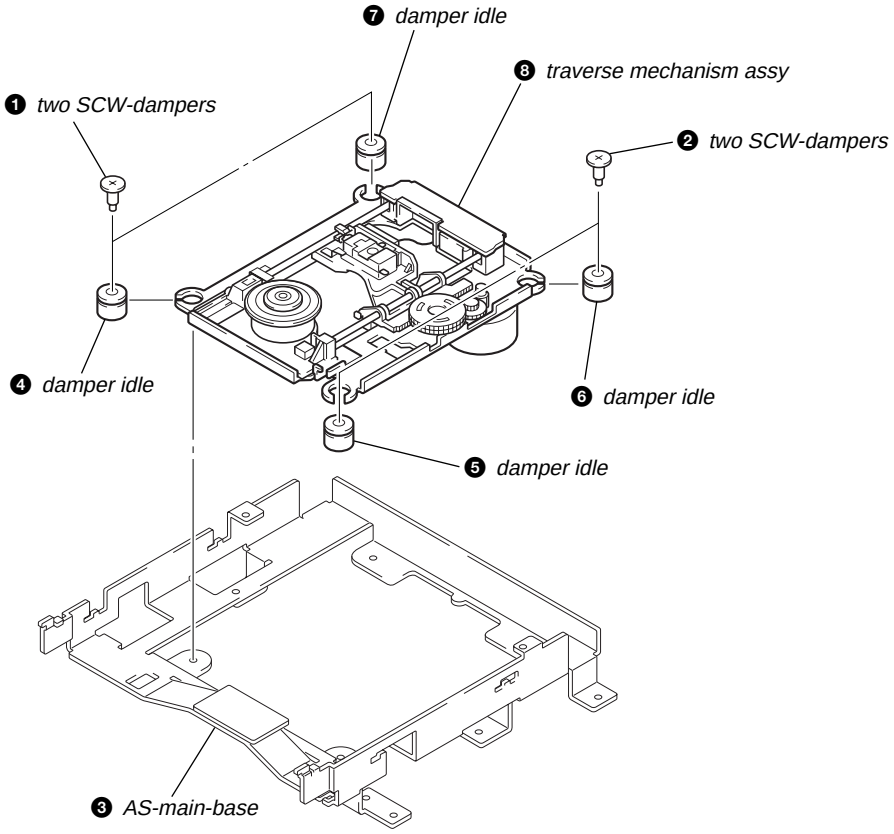
2-8. TD-S-TOP-COVER


❷ Slide the TD-S-top-cover in the direction of arrow Ⓐ, then disengage the claw ⓐ and ⓑ. Hold up the TD-S-top-cover in the direction of arrow Ⓑ, then disengage the claw ⓒ and ⓓ.
❶ screw (+PTT2 × 4)
crew ⓑ
Ⓑ
Ⓐ
crew ⓐ
crew ⓓ
crew ⓒ

2-9. LOADING MECHANISM ASSY



2-10. TRAVERSE MECHANISM ASSY



MEMO

SECTION 3
DIAGRAMS

3-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Boards:
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ● : Through hole.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

Note on Schematic Diagram:
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.

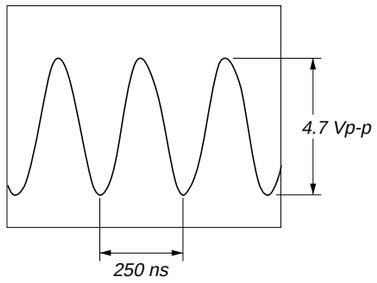
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC cord.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : CD STOP
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : AUDIO
  ⇨ : VIDEO
  ⇨ : DIGITAL OUT

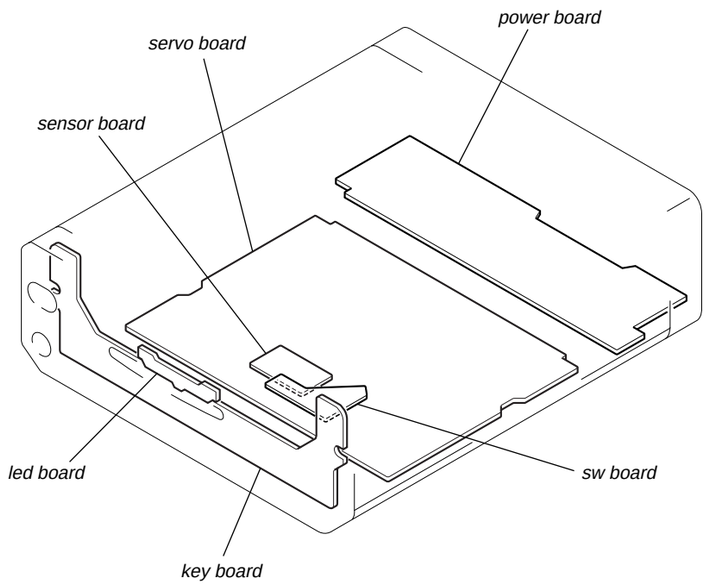
- **Waveform**

– KEY Board –

❶ IC101 ㉒ (CL2)



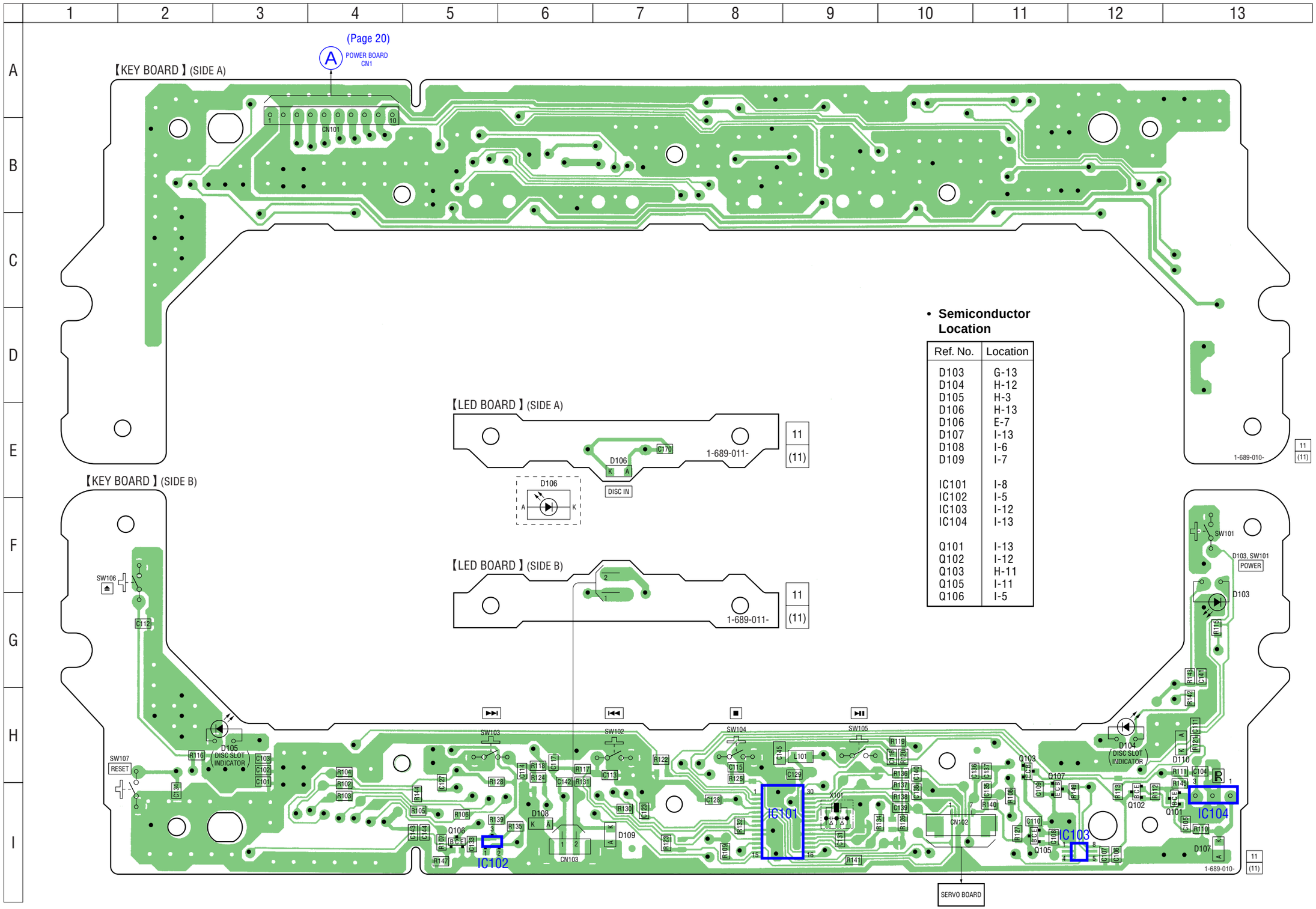
- **Circuit Boards Location**



3-2. PRINTED WIRING BOARDS – KEY Section –

• See page 17 for Circuit Boards Location.

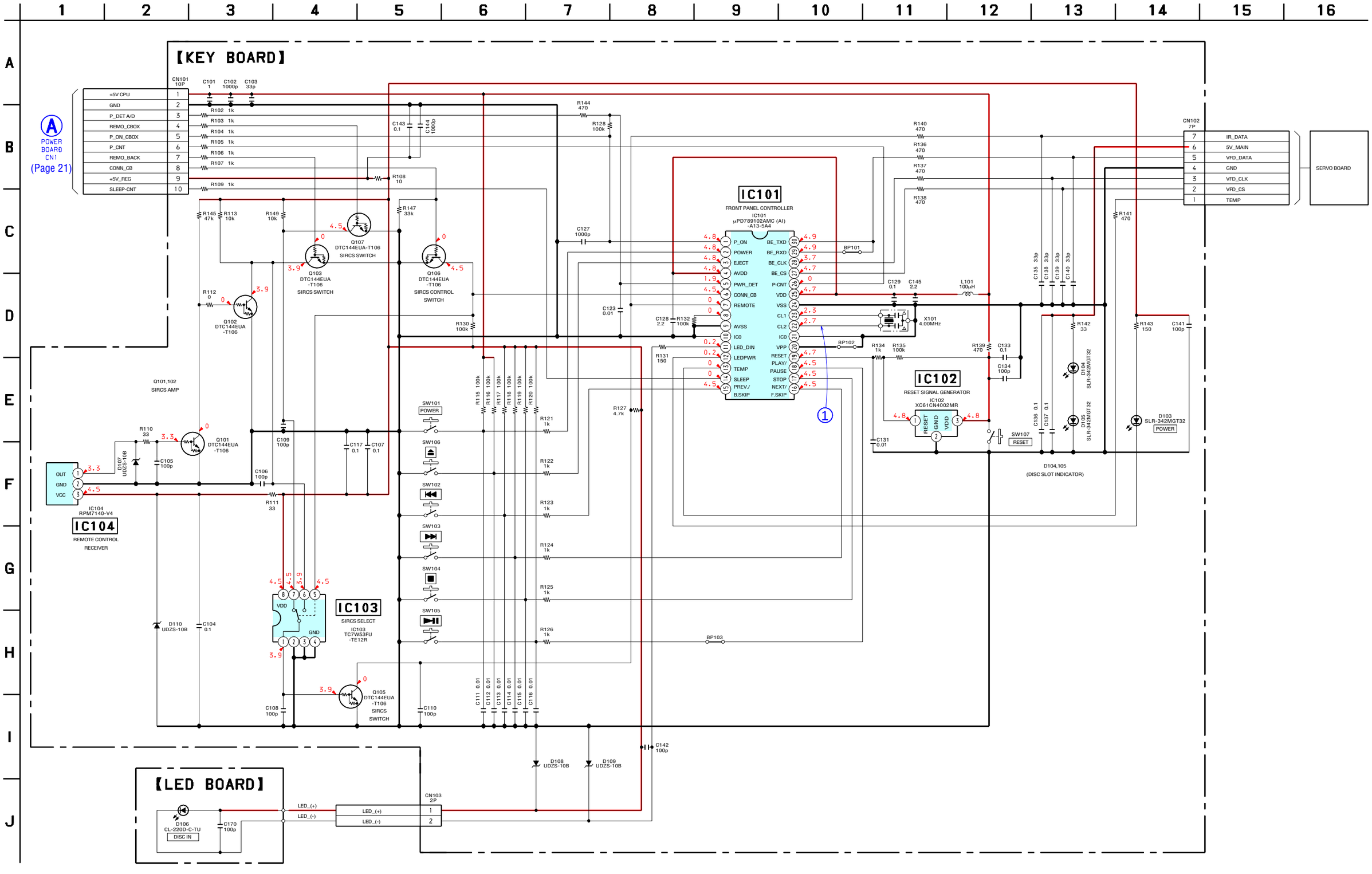
:Uses unleaded solder.



- **Semiconductor Location**

Ref. No.	Location
D103	G-13
D104	H-12
D105	H-3
D106	H-13
D106	E-7
D107	I-13
D108	I-6
D109	I-7
IC101	I-8
IC102	I-5
IC103	I-12
IC104	I-13
Q101	I-13
Q102	I-12
Q103	H-11
Q105	I-11
Q106	I-5

3-3. SCHEMATIC DIAGRAMS – KEY Section – • See page 17 for Waveform.



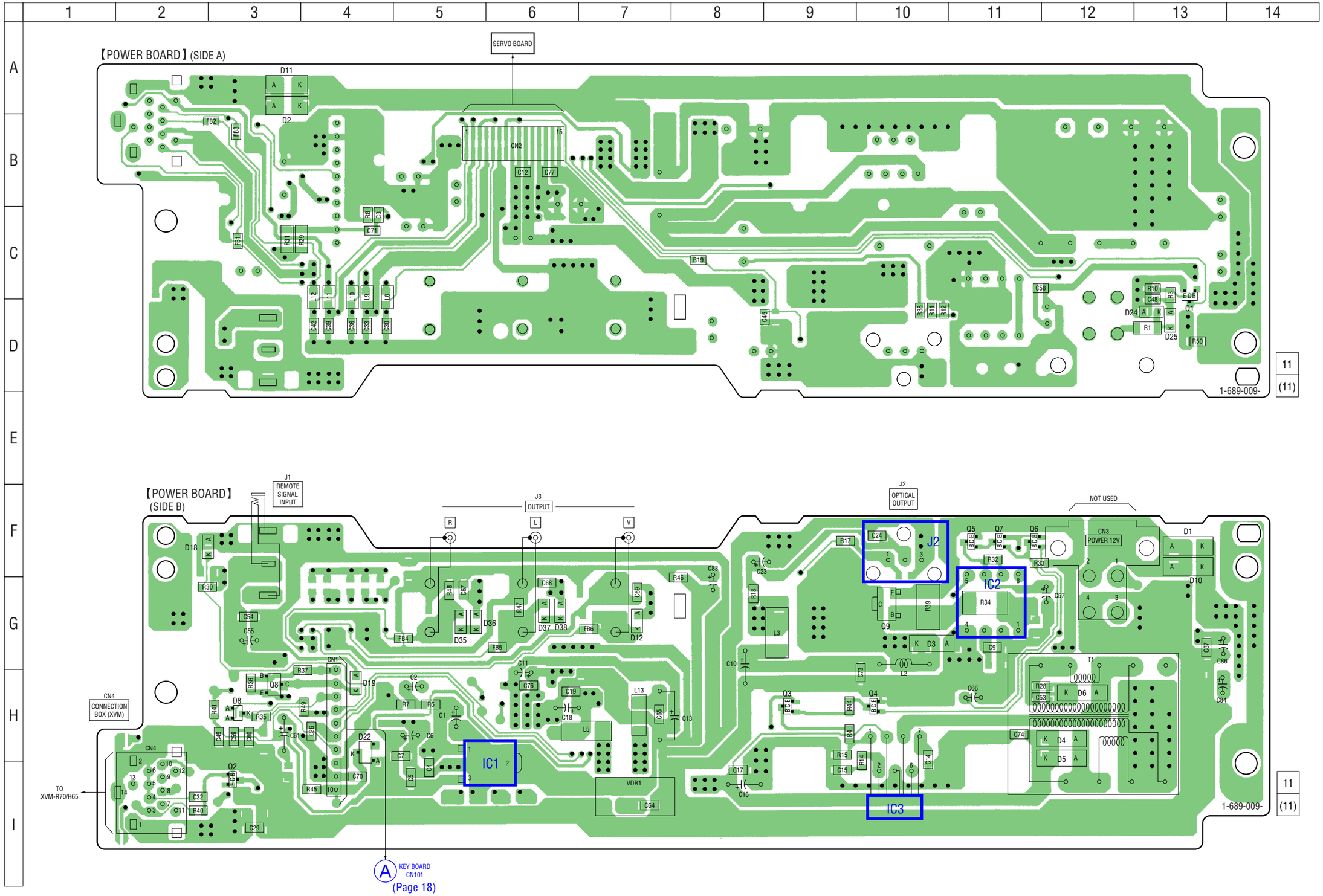
3-4. PRINTED WIRING BOARD – POWER Section –

• See page 17 for Circuit Boards Location.

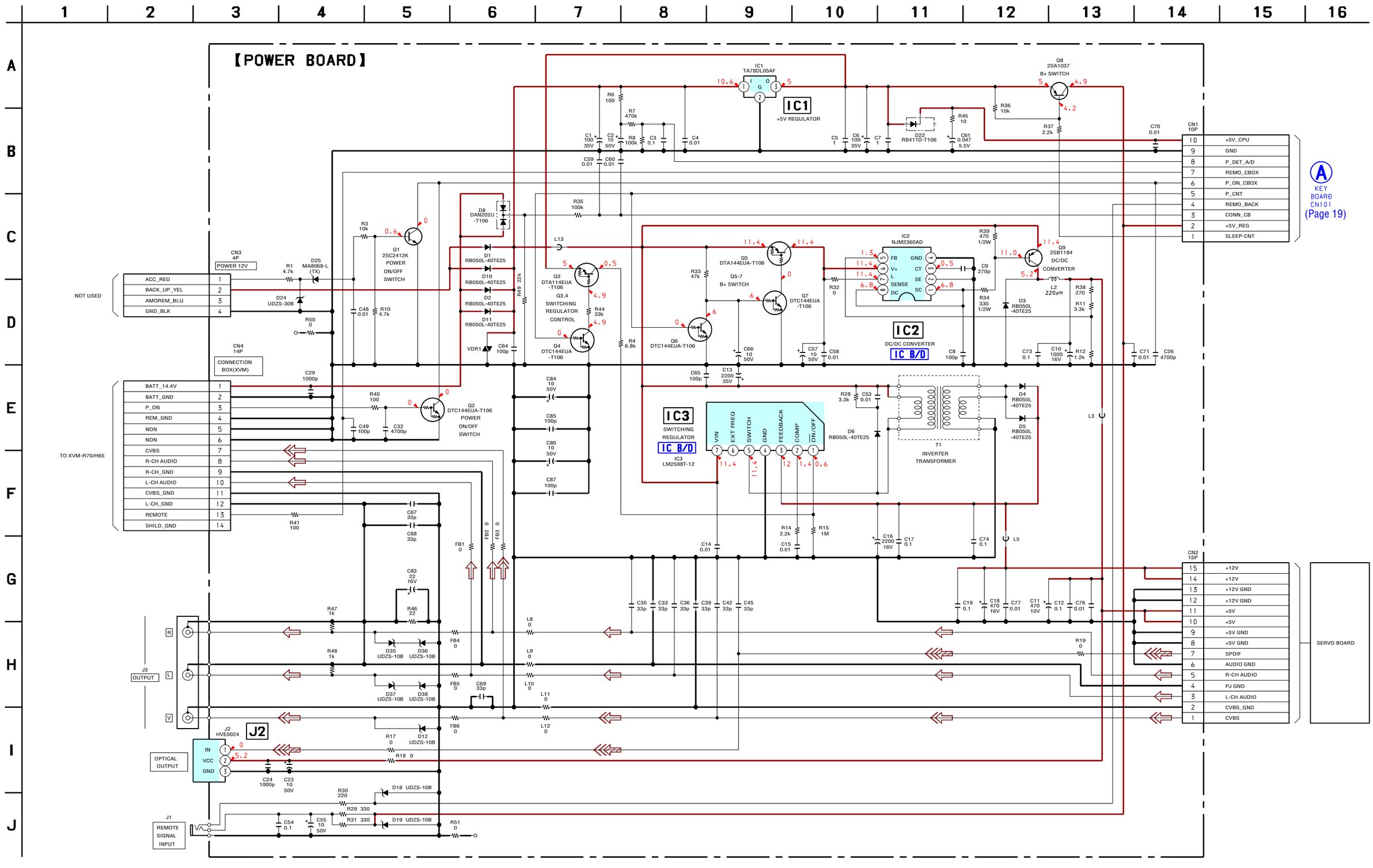
:Uses unleaded solder.

- **Semiconductor Location**

Ref. No.	Location
D1	F-13
D2	A-3
D3	G-10
D4	H-12
D5	H-12
D6	H-12
D8	H-3
D10	F-13
D11	A-3
D12	G-7
D18	F-2
D19	H-4
D22	H-4
D24	D-13
D25	D-13
D35	G-5
D36	G-5
D37	G-6
D38	G-6
IC1	I-6
IC2	G-11
IC3	I-10
J2	F-10
Q1	C-13
Q2	I-3
Q3	H-9
Q4	H-10
Q5	F-11
Q6	F-11
Q7	F-11
Q8	H-3
Q9	G-9



3-5. SCHEMATIC DIAGRAM – POWER Section – • See page 22 for IC Block Diagrams.

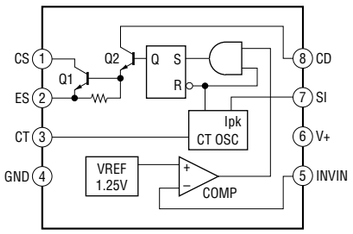


MEMO

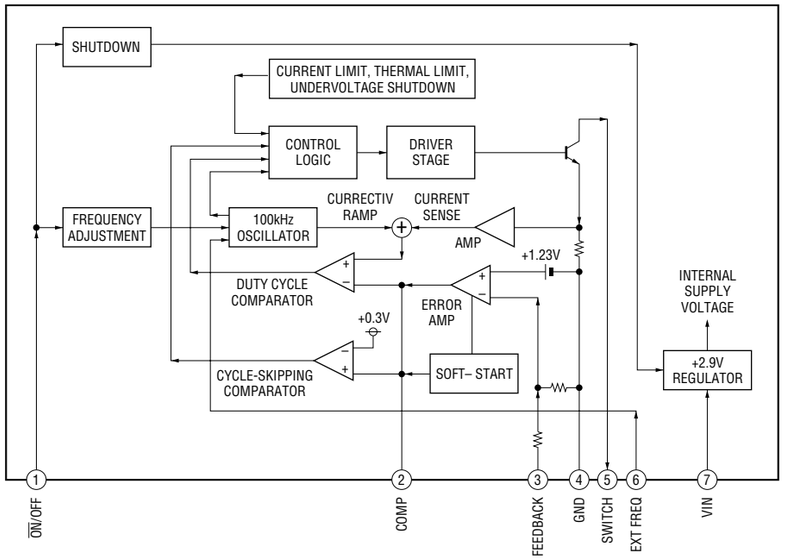
- **IC Block Diagrams**

– POWER board –

IC2 NJM2360AD



IC3 LM2588T-12

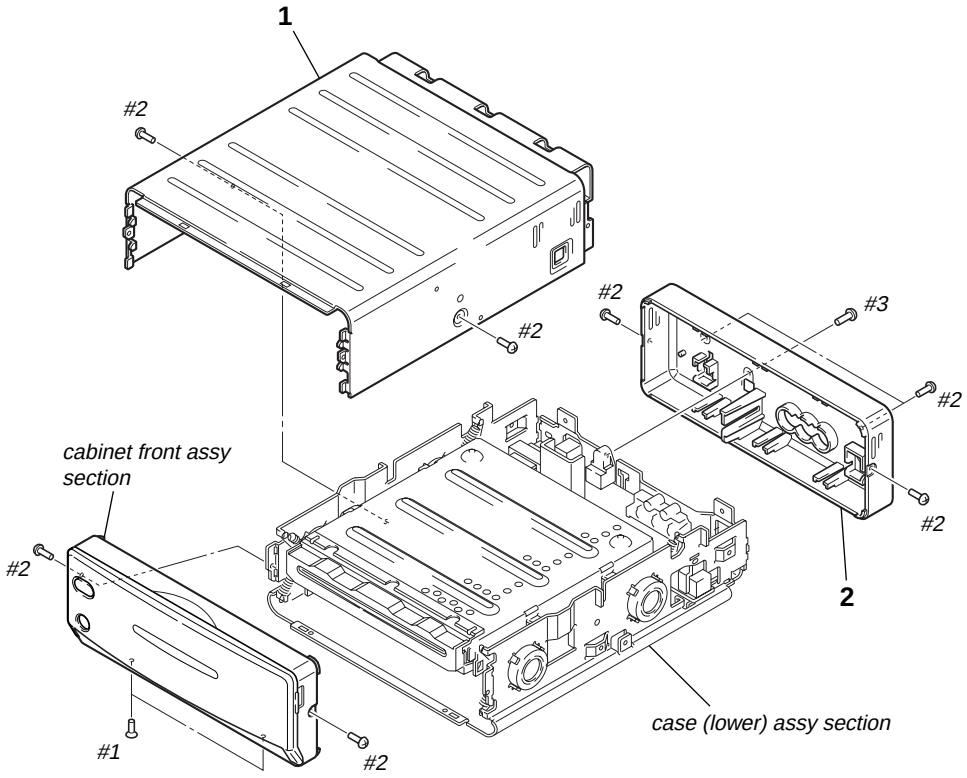


SECTION 4
EXPLODED VIEWS

NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Accessories are given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

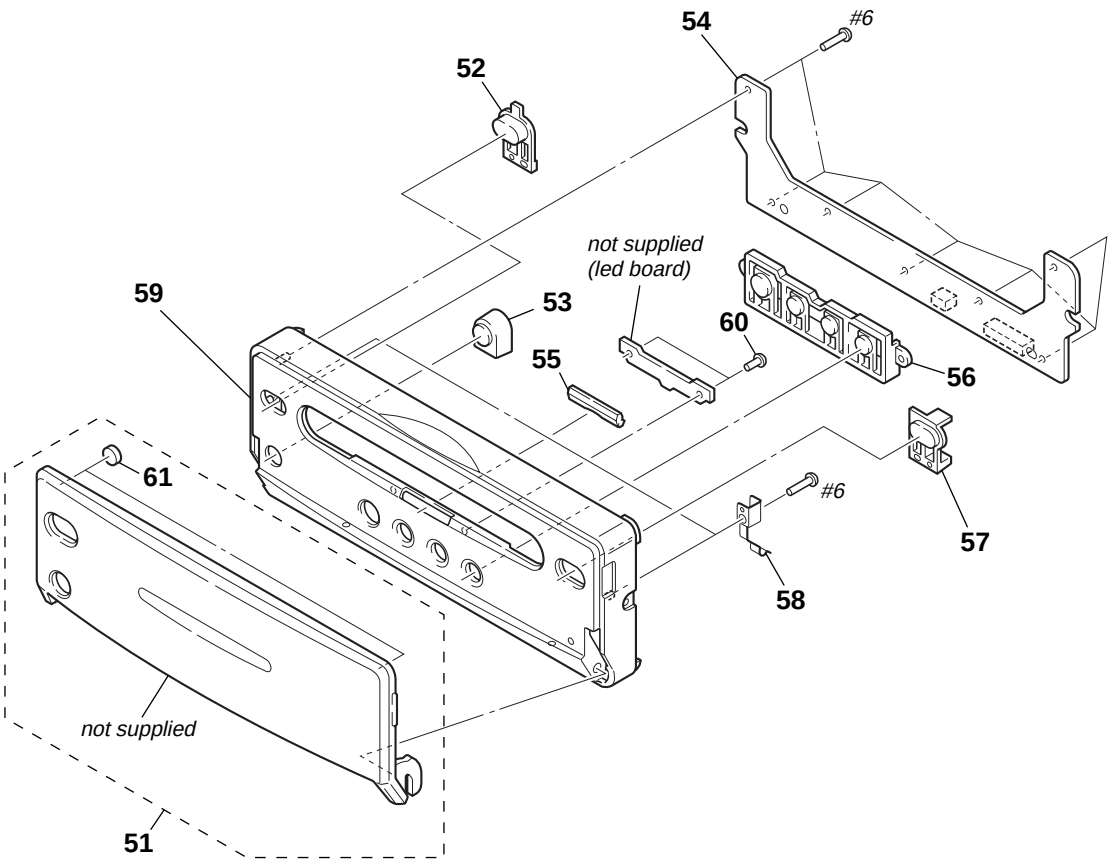
4-1. OVERALL SECTION



Ref. No.	Part No.	Description	Remark
1	3-255-475-01	CASE (UPPER)	
2	3-255-474-01	CAVITY (REAR)	

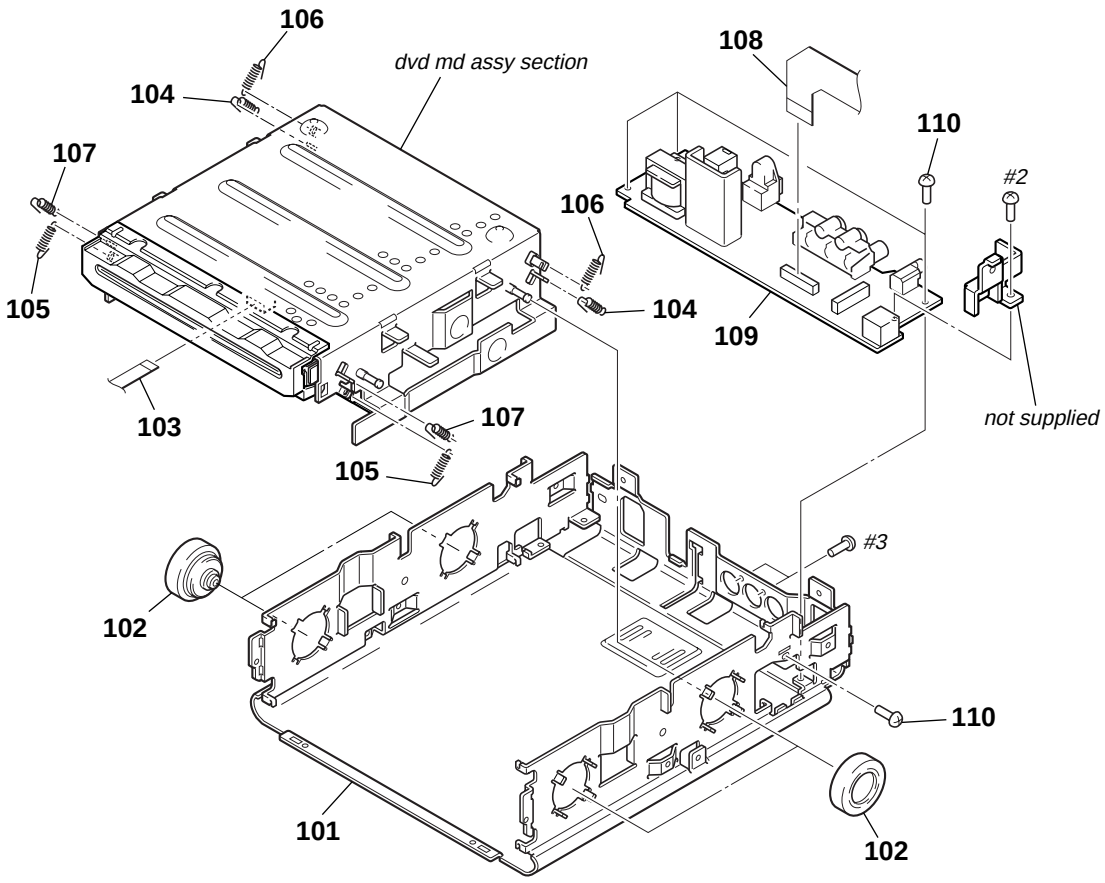
Ref. No.	Part No.	Description	Remark
#1	7-685-233-14	+K 2.6X6	
#2	7-621-770-67	SCREW +B 2.6X6	
#3	7-685-545-14	SCREW +BTP 3X6 TYPE2 N-S	

4-2. CABINET FRONT ASSY SECTION



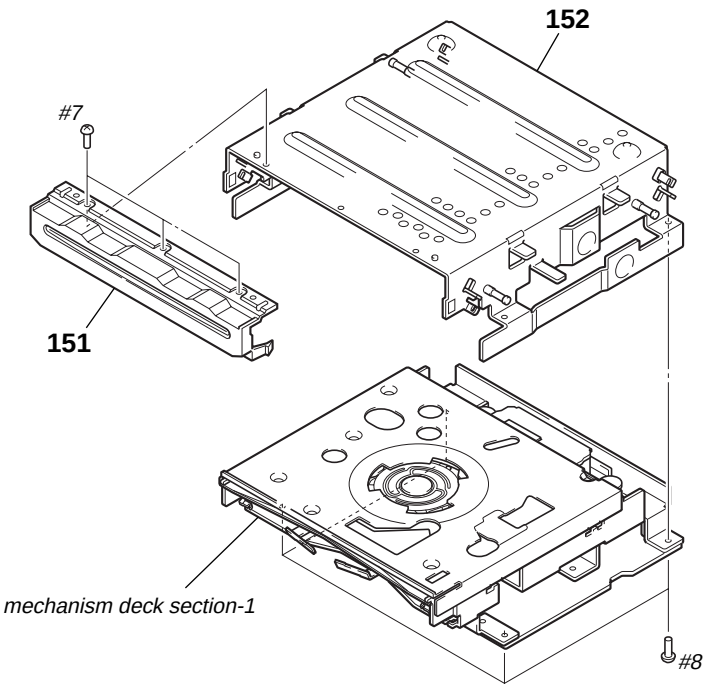
Ref. No.	Part No.	Description	Remark
51	A-3337-875-A	LID (DVD) ASSY	
52	3-255-481-01	BUTTON (POWER)	
53	3-255-483-01	WINDOW (IR)	
54	A-3274-987-A	KEY BOARD, COMPLETE	
55	3-255-484-01	INDICATOR	
56	3-255-479-01	BUTTON (MAIN) (▶II, ■, I◀◀, ▶▶I)	
57	3-255-480-01	BUTTON (EJECT) (⏏)	
58	3-255-492-01	SPRING (LID)	
59	X-3383-815-1	FRONT SUB ASSY, CABINET	
60	3-257-897-01	SCREW (1.7X4)	
61	3-254-851-01	CUSHION (LIFT)	
#6	7-685-105-19	TAPPING +P 2X8 NON-SLIT	

4-3. CASE (LOWER) ASSY SECTION



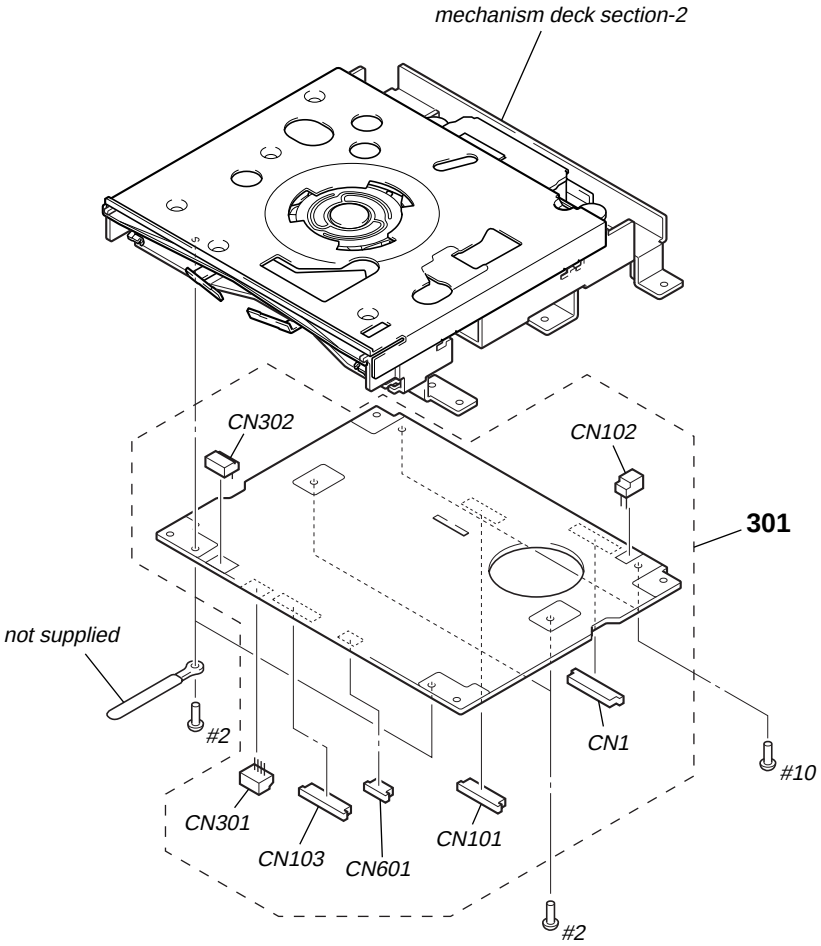
Ref. No.	Part No.	Description	Remark
101	3-255-477-01	CASE (LOW)	
102	3-225-807-12	DAMPER (S)	
103	1-689-013-11	KEY FLEXIBLE BOARD	
104	3-255-494-01	SPRING (MD) A, TENSION	
105	3-255-495-01	SPRING (MD) B, TENSION	
106	3-255-496-01	SPRING (MD) C, TENSION	
107	3-255-497-01	SPRING (MD) D, TENSION	
108	1-689-012-11	POWER FLEXIBLE BOARD	
109	A-3274-984-A	POWER BOARD, COMPLETE	
110	3-922-535-11	SCREW (+BTT)	
#2	7-621-770-67	SCREW +B 2.6X6	
#3	7-685-545-14	SCREW +BTP 3X6 TYPE2 N-S	

4-4. DVD MD ASSY SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	X-3383-814-1	ESCUTCHEON ASSY		#7	7-685-532-19	SCREW +B 2.6X5	
152	X-3383-813-2	CHASSIS (MD) ASSY		#8	7-685-546-14	SCREW +B 3X8	

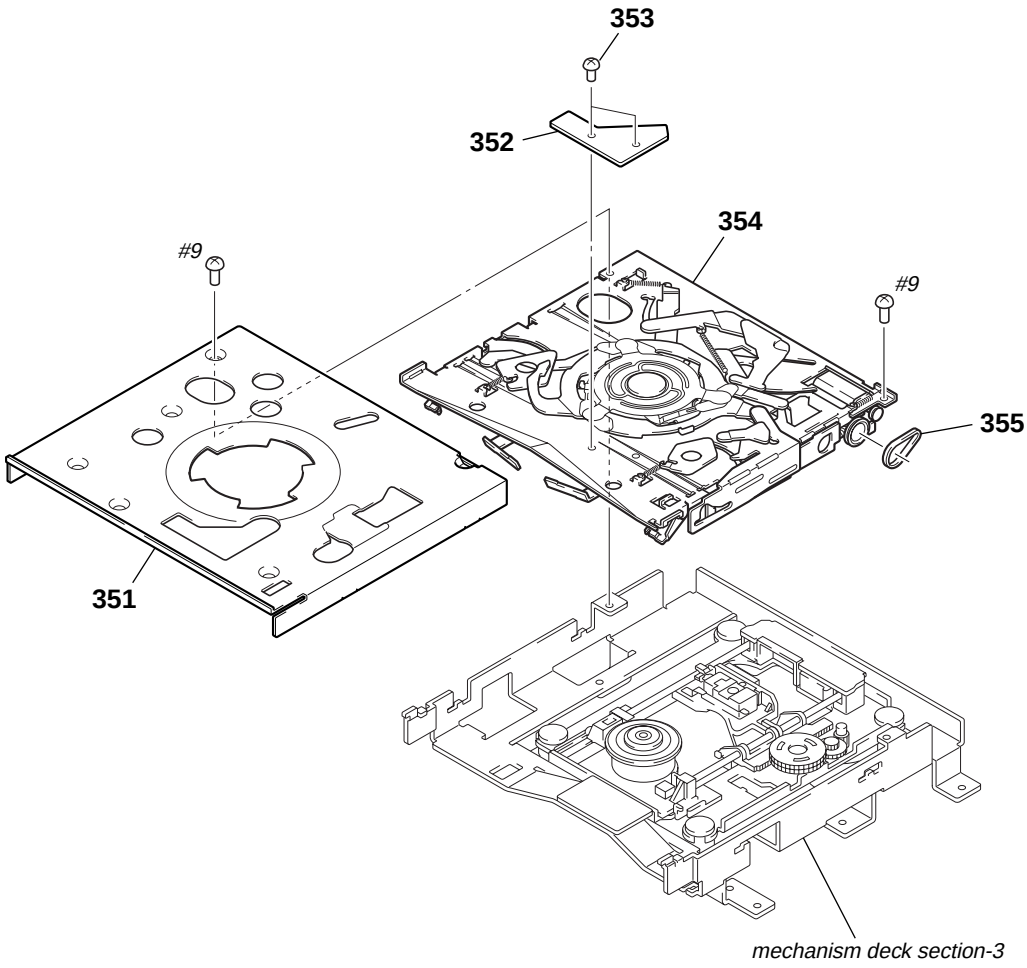
4-5. MECHANISM DECK SECTION-1



Ref. No.	Part No.	Description	Remark
301	9-885-037-60	SERVO BOARD, COMPLETE	
CN1	9-885-037-62	CONNECTOR 15 PIN	
CN101	9-885-037-64	CONNECTOR 24 PIN	
CN102	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CN103	9-885-037-63	CONNECTOR 15 PIN	

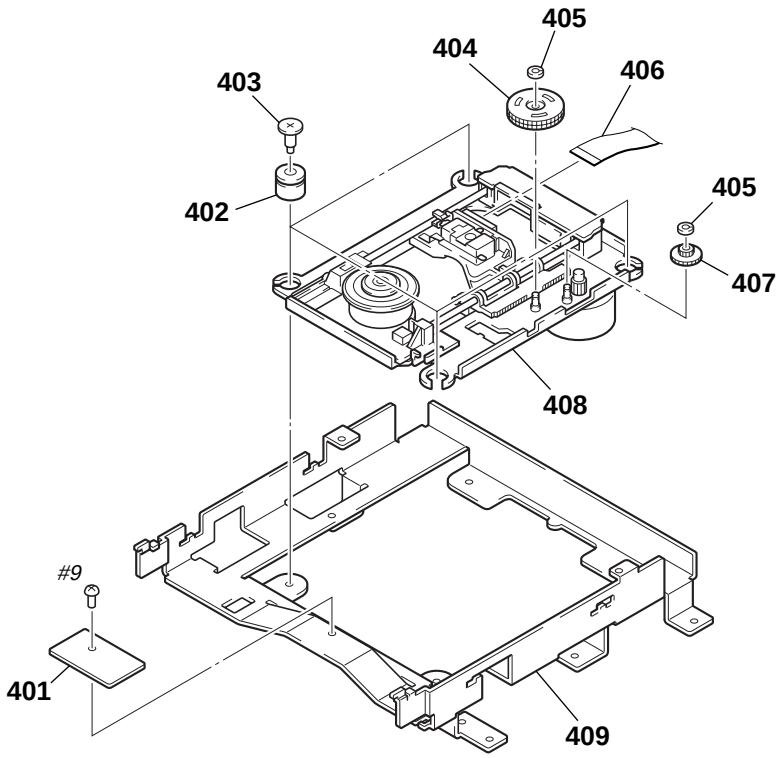
Ref. No.	Part No.	Description	Remark
* CN301	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P	
* CN302	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CN601	9-885-037-65	CONNECTOR 7 PIN	
#2	7-621-770-67	SCREW +B 2.6X6	
#10	7-621-773-95	SCREW +B 2.6X6	

4-6. MECHANISM DECK SECTION-2



Ref. No.	Part No.	Description	Remark
351	9-885-036-31	TD-S-TOP-COVER	
352	9-885-036-24	SW BOARD, COMPLETE	
353	9-885-036-43	SCREW (N), M1.7X1.5	
354	9-885-036-22	LOADING MECHANISM ASSY	
355	9-885-036-28	LOADING BELT-L	
#9	7-685-781-09	SCREW +PTT 2X4 (S)	

4-7. MECHANISM DECK SECTION-3



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
401	9-885-036-25	SENSOR BOARD, COMPLETE	
402	9-885-036-29	DAMPER IDLE	
403	9-885-036-30	SCW-DAMPER	
404	9-885-036-27	AS GEAR 2ND	
405	9-885-036-42	PSW 2.1X4X0.25C	
406	9-885-036-32	FFC-0.5-24 CORE L70	
407	9-885-036-33	GEAR 3RD 2MP	
⚠408	9-885-036-23	TRAVERSE MECHANISM ASSY	
409	9-885-036-26	AS-MAIN-BASE	
#9	7-685-781-09	SCREW +PTT 2X4 (S)	

SECTION 5
ELECTRICAL PARTS LIST

KEY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA. . : μA. . uPA. . : μPA. .
  uPB. . : μPB. . uPC. . : μPC. .
  uPD. . : μPD. .
- CAPACITORS
  uF: μF
- COILS
  uH: μH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-3274-987-A	KEY BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-115-156-11	CERAMIC CHIP	1uF		10V
C102	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C103	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C104	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C105	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C106	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C107	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C108	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C109	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C110	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C111	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C112	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C113	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C114	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C115	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C116	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C117	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C123	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C127	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C128	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C129	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C131	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C133	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C134	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C135	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C136	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C137	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C138	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C139	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C140	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C141	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C142	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C143	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C144	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C145	1-164-505-11	CERAMIC CHIP	2.2uF		16V
		< CONNECTOR >			
* CN101	1-564-712-11	PIN, CONNECTOR (SMALL TYPE) 10P			
CN102	1-770-469-21	CONNECTOR, FFC/FPC 7P			
* CN103	1-691-371-21	PIN, CONNECTOR (PC BOARD) 2P			

Ref. No.	Part No.	Description			Remark
		< DIODE >			
D103	8-719-052-06	LED SLR-342MGT32 (POWER)			
D104	8-719-052-06	LED SLR-342MGT32 (DISC SLOT INDICATOR)			
D105	8-719-052-06	LED SLR-342MGT32 (DISC SLOT INDICATOR)			
D107	8-719-977-28	DIODE UDZSTE-1710B			
D108	8-719-977-28	DIODE UDZSTE-1710B			
D109	8-719-977-28	DIODE UDZSTE-1710B			
D110	8-719-977-28	DIODE UDZSTE-1710B			
		< IC >			
IC101	6-803-218-01	IC uPD789102AMC (A1) -A13-5A4			
IC102	8-759-833-11	IC XC61CN4002MR			
IC103	8-759-564-49	IC TC7W53FU (TE12R)			
IC104	6-701-681-01	IC RPM7140-V4			
		< COIL >			
L101	1-412-963-11	INDUCTOR	100uH		
		< TRANSISTOR >			
Q101	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q102	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q103	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q105	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q106	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q107	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
		< RESISTOR >			
R102	1-216-821-11	METAL CHIP	1K	5%	1/10W
R103	1-216-821-11	METAL CHIP	1K	5%	1/10W
R104	1-216-821-11	METAL CHIP	1K	5%	1/10W
R105	1-216-821-11	METAL CHIP	1K	5%	1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R107	1-216-821-11	METAL CHIP	1K	5%	1/10W
R108	1-216-797-11	METAL CHIP	10	5%	1/10W
R109	1-216-821-11	METAL CHIP	1K	5%	1/10W
R110	1-216-803-11	METAL CHIP	33	5%	1/10W
R111	1-216-803-11	METAL CHIP	33	5%	1/10W
R112	1-216-864-11	SHORT CHIP	0		
R113	1-216-833-11	METAL CHIP	10K	5%	1/10W
R115	1-216-845-11	METAL CHIP	100K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R116	1-216-845-11	METAL CHIP	100K	5%	1/10W
R117	1-216-845-11	METAL CHIP	100K	5%	1/10W
R118	1-216-845-11	METAL CHIP	100K	5%	1/10W
R119	1-216-845-11	METAL CHIP	100K	5%	1/10W
R120	1-216-845-11	METAL CHIP	100K	5%	1/10W
R121	1-216-821-11	METAL CHIP	1K	5%	1/10W
R122	1-216-821-11	METAL CHIP	1K	5%	1/10W
R123	1-216-821-11	METAL CHIP	1K	5%	1/10W
R124	1-216-821-11	METAL CHIP	1K	5%	1/10W
R125	1-216-821-11	METAL CHIP	1K	5%	1/10W
R126	1-216-821-11	METAL CHIP	1K	5%	1/10W
R127	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R128	1-216-845-11	METAL CHIP	100K	5%	1/10W
R130	1-216-845-11	METAL CHIP	100K	5%	1/10W
R131	1-216-811-11	METAL CHIP	150	5%	1/10W
R132	1-216-845-11	METAL CHIP	100K	5%	1/10W
R134	1-216-821-11	METAL CHIP	1K	5%	1/10W
R135	1-216-845-11	METAL CHIP	100K	5%	1/10W
R136	1-216-817-11	METAL CHIP	470	5%	1/10W
R137	1-216-817-11	METAL CHIP	470	5%	1/10W
R138	1-216-817-11	METAL CHIP	470	5%	1/10W
R139	1-216-817-11	METAL CHIP	470	5%	1/10W
R140	1-216-817-11	METAL CHIP	470	5%	1/10W
R141	1-216-817-11	METAL CHIP	470	5%	1/10W
R142	1-216-803-11	METAL CHIP	33	5%	1/10W
R143	1-216-811-11	METAL CHIP	150	5%	1/10W
R144	1-216-817-11	METAL CHIP	470	5%	1/10W
R145	1-216-841-11	METAL CHIP	47K	5%	1/10W
R147	1-216-839-11	METAL CHIP	33K	5%	1/10W
R149	1-216-833-11	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
SW101	1-762-196-21	SWITCH, TACT (POWER)			
SW102	1-762-196-21	SWITCH, TACT (⏏)			
SW103	1-762-196-21	SWITCH, TACT (⏮)			
SW104	1-762-196-21	SWITCH, TACT (⏭)			
SW105	1-762-196-21	SWITCH, TACT (■)			
SW106	1-762-196-21	SWITCH, TACT (▶II)			
SW107	1-771-737-21	SWITCH, TACTILE (RESET)			
		< VIBRATOR >			
X101	1-781-646-21	VIBRATOR, CERAMIC (4MHz)			
**********					
		LED BOARD			
		**********			
		< CAPACITOR >			
C170	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< LED >			
D106	6-500-418-01	LED CL-220D-C-TU (DISC IN)			
**********					
	A-3274-984-A	POWER BOARD, COMPLETE			
		**********			
	7-685-545-14	SCREW +BTP 3X6 TYPE2 N-S			

Ref. No.	Part No.	Description			Remark
		< CAPACITOR/SHORT >			
C1	1-107-910-11	ELECT	100uF	20%	35V
C2	1-107-906-11	ELECT	10uF	20%	50V
C3	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C4	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C5	1-115-156-11	CERAMIC CHIP	1uF		10V
C6	1-107-910-11	ELECT	100uF	20%	35V
C7	1-115-156-11	CERAMIC CHIP	1uF		10V
C8	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C9	1-164-388-11	CERAMIC CHIP	270PF	5%	50V
C10	1-107-884-11	ELECT	1000uF	20%	16V
C11	1-104-652-11	ELECT	470uF	20%	10V
C12	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C13	1-107-898-11	ELECT	2200uF	20%	35V
C14	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C15	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C16	1-128-339-11	ELECT	2200uF	20%	16V
C17	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C18	1-128-525-11	ELECT	470uF	20%	16V
C19	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C23	1-107-906-11	ELECT	10uF	20%	50V
C24	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C26	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C29	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C30	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C32	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C33	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C36	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C39	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C42	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C45	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C48	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C49	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C53	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C54	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C55	1-107-906-11	ELECT	10uF	20%	50V
C57	1-107-906-11	ELECT	10uF	20%	50V
C58	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C59	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C60	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C61	1-110-654-11	ELECT (BLOCK)	0.047F		5.5V
C64	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C65	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C66	1-107-906-11	ELECT	10uF	20%	50V
C67	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C68	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C69	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C70	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C71	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C73	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C74	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C76	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C77	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C83	1-107-907-11	ELECT	22uF	20%	50V
C84	1-107-906-11	ELECT	10uF	20%	50V
C85	1-162-927-11	CERAMIC CHIP	100PF	5%	50V

POWER

Ref. No.	Part No.	Description			Remark
C86	1-107-906-11	ELECT	10uF	20%	50V
C87	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
		< CONNECTOR >			
* CN1	1-564-712-11	PIN, CONNECTOR (SMALL TYPE) 10P			
CN2	1-750-840-21	HOUSING, CONNECTOR 15P			
* CN3	1-691-785-11	PIN, CONNECTOR (PC BOARD) 4P (POWER 12V)			
* CN4	1-784-890-11	CONNECTOR 14P (CONNECTION BOX (XVM))			
		< DIODE >			
D1	8-719-072-43	DIODE	RB050L-40TE25		
D2	8-719-072-43	DIODE	RB050L-40TE25		
D3	8-719-072-43	DIODE	RB050L-40TE25		
D4	8-719-072-43	DIODE	RB050L-40TE25		
D5	8-719-072-43	DIODE	RB050L-40TE25		
D6	8-719-072-43	DIODE	RB050L-40TE25		
D8	8-719-941-86	DIODE	DAN202UT106		
D10	8-719-072-43	DIODE	RB050L-40TE25		
D11	8-719-072-43	DIODE	RB050L-40TE25		
D12	8-719-977-28	DIODE	UDZSTE-1710B		
D18	8-719-977-28	DIODE	UDZSTE-1710B		
D19	8-719-977-28	DIODE	UDZSTE-1710B		
D22	8-719-975-40	DIODE	RB411D-T146		
D24	8-719-083-71	DIODE	UDZSTE-1730B		
D25	8-719-017-62	DIODE	MA8068-L-TX		
D35	8-719-977-28	DIODE	UDZSTE-1710B		
D36	8-719-977-28	DIODE	UDZSTE-1710B		
D37	8-719-977-28	DIODE	UDZSTE-1710B		
D38	8-719-977-28	DIODE	UDZSTE-1710B		
		< SHORT >			
FB1	1-216-864-11	SHORT CHIP	0		
FB2	1-216-864-11	SHORT CHIP	0		
FB3	1-216-864-11	SHORT CHIP	0		
FB4	1-216-864-11	SHORT CHIP	0		
FB5	1-216-864-11	SHORT CHIP	0		
FB6	1-216-864-11	SHORT CHIP	0		
		< IC >			
IC1	6-704-684-01	IC	TA78DL05AF-TE16L		
IC2	8-759-360-43	IC	NJM2360AD		
IC3	6-704-485-01	IC	LM2588T-12		
		< JACK/IC >			
J1	1-573-798-11	JACK, MINIATURE (DIA. 3.5) (REMOTE SIGNAL INPUT)			
J2	8-749-016-00	IC	HVE0024 (OPTICAL OUTPUT)		
J3	1-815-310-11	JACK 3P (OUTPUT)			
		< COIL/SHORT >			
L2	1-406-979-11	INDUCTOR	220uH		
L3	1-469-979-21	FERRITE			
L5	1-469-979-21	FERRITE			
L8	1-216-295-00	SHORT CHIP	0		
L9	1-216-295-00	SHORT CHIP	0		
L10	1-216-295-00	SHORT CHIP	0		

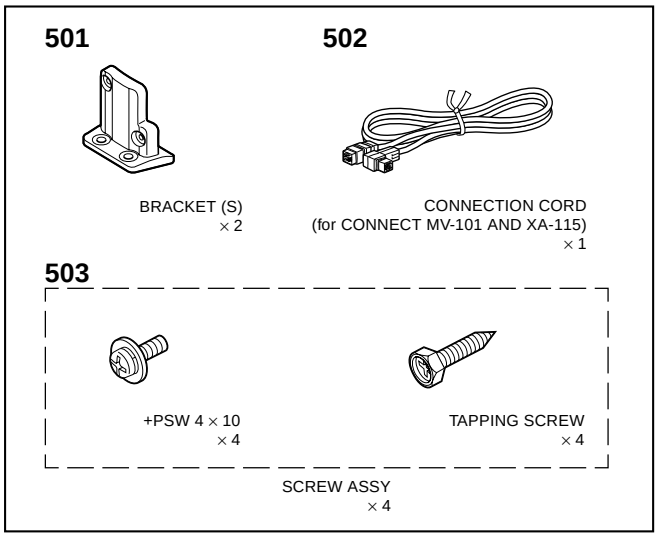
Ref. No.	Part No.	Description			Remark
L11	1-216-295-00	SHORT CHIP	0		
L12	1-216-295-00	SHORT CHIP	0		
L13	1-469-568-21	FERRITE			
		< TRANSISTOR >			
Q1	8-729-120-28	TRANSISTOR	2SC2412K-T-146-Q		
Q2	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q3	8-729-028-73	TRANSISTOR	DTA114EUA-T106		
Q4	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q5	8-729-028-91	TRANSISTOR	DTA144EUA-T106		
Q6	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q7	8-729-029-14	TRANSISTOR	DTC144EUA-T106		
Q8	8-729-026-49	TRANSISTOR	2SA1037AK-T146-QR		
Q9	8-729-922-46	TRANSISTOR	2SB1184-TLQ		
		< RESISTOR >			
R1	1-216-214-00	RES-CHIP	4.7K	5%	1/8W
R3	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R4	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R6	1-216-809-11	METAL CHIP	100	5%	1/10W
R7	1-218-911-11	RES-CHIP	470K	0.5%	1/10W
R8	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R10	1-218-863-11	METAL CHIP	4.7K	0.5%	1/10W
R11	1-218-859-11	METAL CHIP	3.3K	0.5%	1/10W
R12	1-218-849-11	METAL CHIP	1.2K	0.5%	1/10W
R14	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R15	1-216-857-11	METAL CHIP	1M	5%	1/10W
R17	1-216-864-11	SHORT CHIP	0		
R18	1-216-864-11	SHORT CHIP	0		
R19	1-216-864-11	SHORT CHIP	0		
R28	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R29	1-216-186-00	RES-CHIP	330	5%	1/8W
R30	1-216-813-11	METAL CHIP	220	5%	1/10W
R31	1-216-186-00	RES-CHIP	330	5%	1/8W
R32	1-216-864-11	SHORT CHIP	0		
R33	1-216-841-11	METAL CHIP	47K	5%	1/10W
R34	1-220-269-11	RES-CHIP	330	5%	1/2W
R35	1-216-845-11	METAL CHIP	100K	5%	1/10W
R36	1-216-833-11	METAL CHIP	10K	5%	1/10W
R37	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R38	1-218-833-11	METAL CHIP	270	0.5%	1/10W
R39	1-218-326-11	RES-CHIP	470	5%	1/2W
R40	1-216-809-11	METAL CHIP	100	5%	1/10W
R41	1-216-809-11	METAL CHIP	100	5%	1/10W
R44	1-216-839-11	METAL CHIP	33K	5%	1/10W
R45	1-216-797-11	METAL CHIP	10	5%	1/10W
R46	1-216-801-11	METAL CHIP	22	5%	1/10W
R47	1-216-821-11	METAL CHIP	1K	5%	1/10W
R48	1-216-821-11	METAL CHIP	1K	5%	1/10W
R49	1-216-837-11	METAL CHIP	22K	5%	1/10W
R50	1-216-864-11	SHORT CHIP	0		
		< TRANSFORMER >			
T1	1-439-933-11	TRANSFORMER, DC-DC CONVERTER			
		< VARISTOR >			
VDR1	1-801-866-11	VARISTOR ERZV14D220			

****

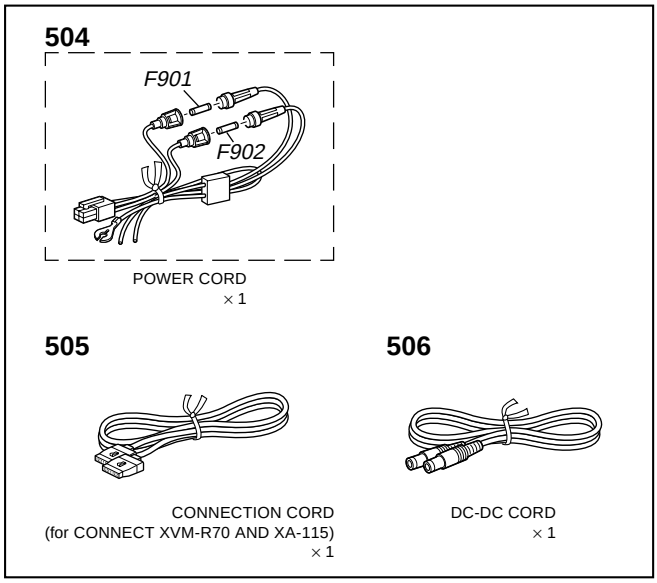
Ref. No.	Part No.	Description	Remark
	9-885-036-25	SENSOR BOARD, COMPLETE	
		**********	
For the parts on SENSOR board, replace the entire mounted board.			
**********			
	9-885-037-60	SERVO BOARD, COMPLETE	
		**********	
		< CONNECTOR >	
CN1	9-885-037-62	CONNECTOR 15PIN	
CN101	9-885-037-64	CONNECTOR 24PIN	
CN102	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
CN103	9-885-037-63	CONNECTOR 15PIN	
* CN301	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P	
* CN302	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CN601	9-885-037-65	CONNECTOR 7PIN	
When any part on the SERVO board except the ones listed above needs to be replaced, replace the entire mounted board.			
**********			
	9-885-036-24	SW BOARD, COMPLETE	
		**********	
For the parts on SW board, replace the entire mounted board.			
**********			
		MISCELLANEOUS	
		**********	
103	1-689-013-11	KEY FLEXIBLE BOARD	
108	1-689-012-11	POWER FLEXIBLE BOARD	
406	9-885-036-32	FFC-0.5-24 CORE L70	
⚠408	9-885-036-23	TRAVERSE MECHANISM ASSY	
**********			
		ACCESSORIES	
		**********	
	1-478-041-11	REMOTE COMMANDER (RM-X135)	
	3-246-353-21	LID, BATTERY CASE (for MDR-IF0140)	
	3-246-367-01	PAD, EAR (for MDR-IF0140)	
	3-255-990-12	MANUAL, INSTRUCTION (ENGLISH)	
	3-255-990-22	MANUAL, INSTRUCTION (FRENCH)	
	3-255-990-32	MANUAL, INSTRUCTION (SPANISH)	
	3-255-993-12	MANUAL, INSTRUCTION,INSTALL (ENGLISH, FRENCH, SPANISH)	
	3-258-687-01	LID, BATTERY CASE (for RM-X135)	
	8-954-200-90	HEADPHONE MDR-IF0140 SET	
	X-3383-763-1	SCREW ASSY (for INSTALLATION of XVM-R70)	
	X-3383-764-1	BRACKET ASSY, FITTING (for INSTALLATION of XVM-R70)	
**********			

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	3-225-809-11	BRACKET (S)	
502	1-827-345-11	CORD, CONNECTION (for CONNECT MV-101 AND XA-115)	
* 503	X-3369-824-1	SCREW ASSY	
504	1-827-263-12	CORD, CONNECTION (POWER)	
505	1-827-262-11	CORD, CONNECTION (for CONNECT XVM-R70 AND XA-115)	
506	1-827-326-11	CORD, CONNECTION (DC-DC CORD)	
F901	1-532-751-11	FUSE, GLASS-TUBE (8A/250V)	
F902	1-532-218-11	FUSE (1A/250V)	

for DVD PLAYER



for OVERHEAD MONITOR



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003.05	New
1.1	2003.10	Addition of information for DVD player (MV-101) with change of POWER Board (ENC-CSA07350)
1.2	2004.04	Addition of accessories for OVERHEAD MONITOR (SPM-04004)